Physical Education

Questions & Answers

FELTHAM PRESS

Part 1 **Mechanics**
A Linear Motion
B Forces and Newton's Laws
C Impulse, Net Force & Projectile Motion
D Angular Motion

Part 2 **Differences in Fitness Measures**
A Training Effects
B Differences in Fitness Measures between Groups

Part 3 **Energy Concepts**
A Energy Sources
B Muscle Fatigue
C ATP-PC System
D Lactate Anaerobic System
E Aerobic Systems

Part 4 **Performance Criteria**
A Excess Post-exercise Oxygen Consumption
B Maximum Oxygen Consumption
C Lactate Threshold

Part 5 **Motor Units and Control**
A Types of Muscle Fibre
B Motor Units
C Proprioceptors and Kinaesthetic Feedback

Part 6 **Individual Differences**
A Personality Theories and Testing
B Achievement Motivation
C Attitudes
D Aggression
E Arousal
F Self Efficacy
G Attribution Theory

Part 7 **Optimising Performance**
A Anxiety and Goal Setting
B Social Facilitation
C Social Learning

Part 8 **Groups**
A Group Dynamics
B Leadership

Questions

Part 1 Mechanics

Part 1A Linear Motion

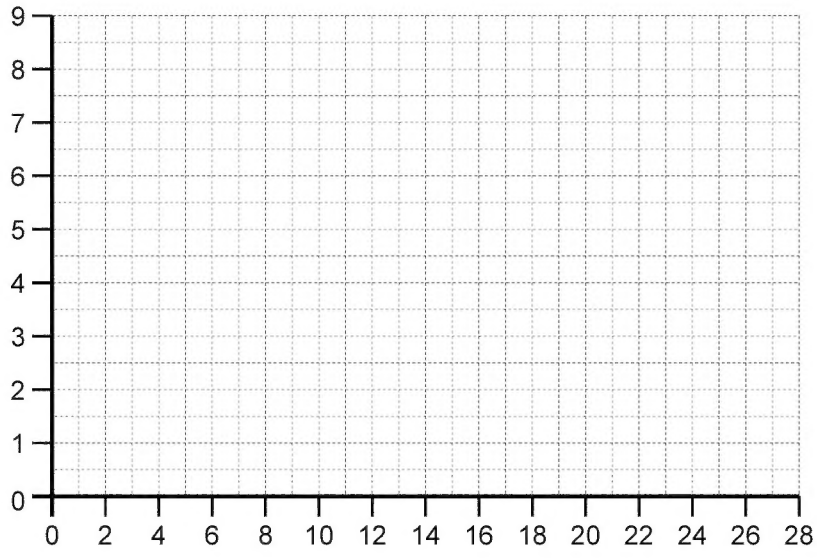
Question 1

The table below shows the velocities of an 18 year old female sprinter during a 200 metre race.

velocity/ms^{-1}	time/seconds
0.0	0
5.0	1
7.1	2
7.8	3
8.0	4
8.1	5
8.1	7
8.0	8
7.9	10
7.8	13
7.7	18
7.6	22
7.5	27

a Plot a graph of velocity against time during this race.

(4 marks)



b When does she reach maximum velocity?

(1 mark)

c What happens to her velocity between 8 and 27 seconds?

(1 mark)

d Use the graph to establish her velocity at 0.5 seconds and 1.5 seconds.

(2 marks)

Part 1B Forces and Newtons Laws

Question 2

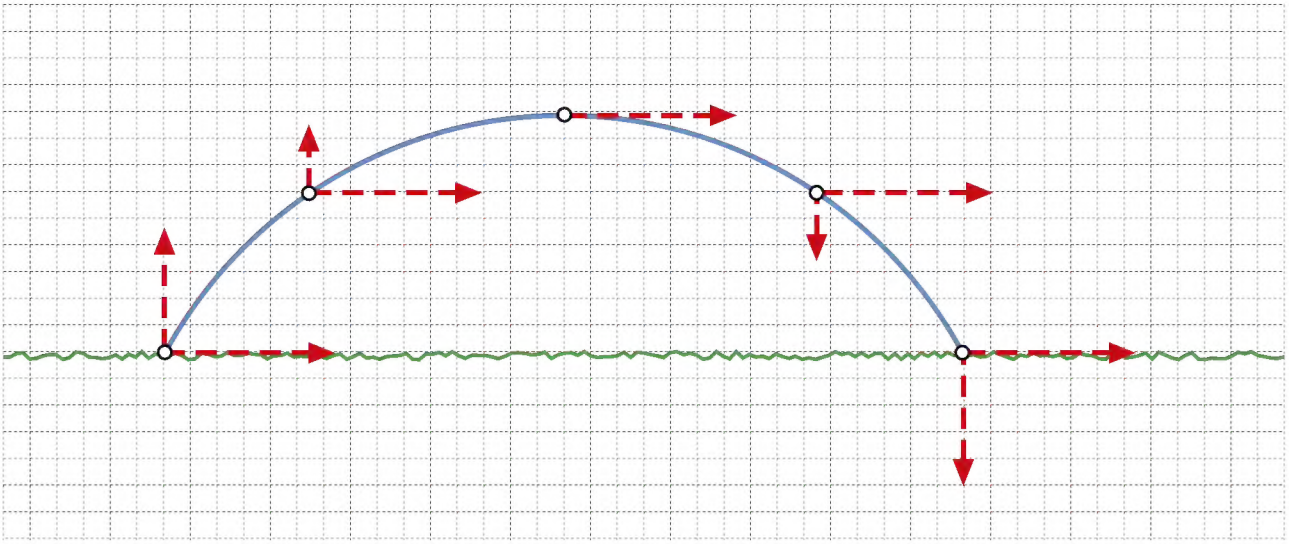
Consider a performer in the 'get set' position, about to start a swimming race. Use this situation to explain Newton's three Laws of Motion.

(6 marks)

Part 1C Impulse, net forces and projectile motion

Question 3

The following diagram shows the horizontal and vertical velocity components during the flight of a projectile.



a Use the information from the diagram to explain how the magnitude of;

i The vertical component varies during flight;

(3 marks)

ii the horizontal component varies during flight.

(2 marks)

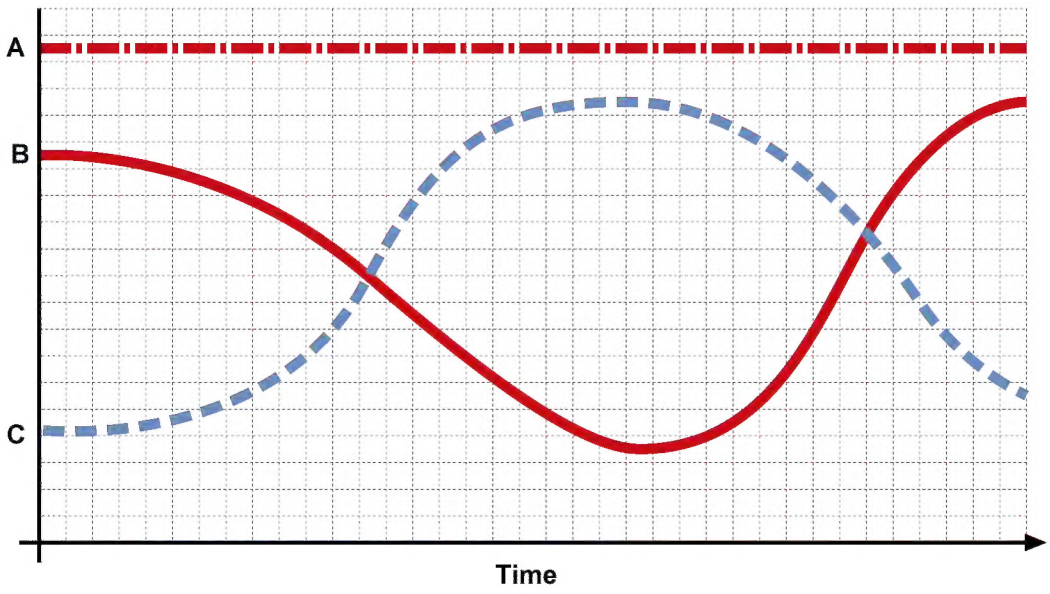
b Explain how various factors affect the horizontal distance achieved by a projectile.

(5 marks)

Part 1D Angular motion

Question 4

The following graph shows how three parameters, *angular momentum*, *angular velocity* and *moment of inertia*, change during the performance of a tucked one and a half front somersault dive.



a Which letters correspond to each of the parameters named?

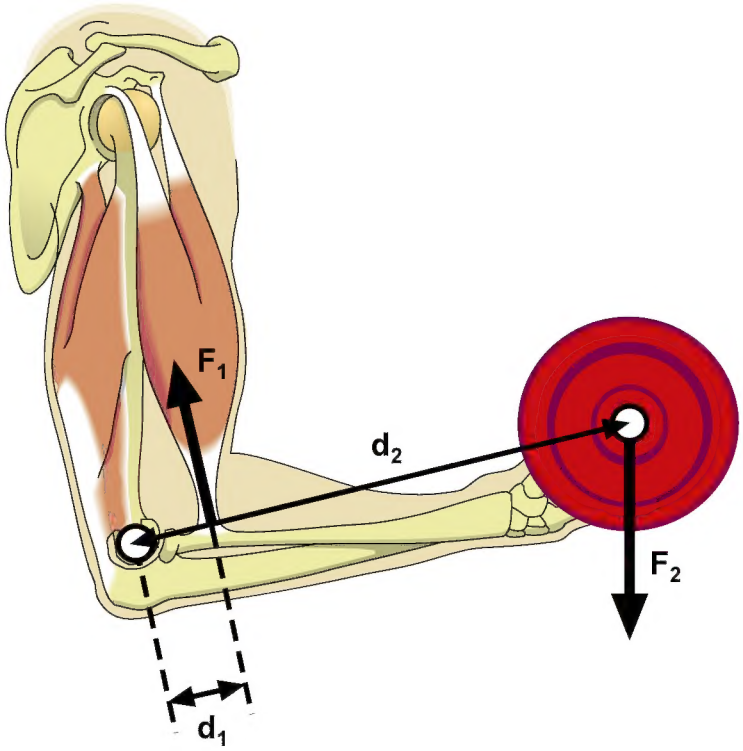
(3 marks)

b Explain how each of the parameters varies during the dive.

(6 marks)

Question 5

Wrestling is a sport that involves strength, and this strength is often applied through isometric muscle contractions, and thus elite wrestlers will train using this type of strength training. The following diagram represents the situation of a wrestler performing an exercise where the forearm is held flexed supporting a dumb-bell – a static or isometric biceps curl. A situation which may be repeated during a wrestling hold.



a The system in the diagram is said to be in angular equilibrium. Explain what you understand by this term.

(2 marks)

b In the diagram, the moment of a force is equal to the magnitude of the force multiplied by the perpendicular distance between line of force and the axis/pivot. Explain how the moments of the forces involved in figure 2 could be altered, and how this would provide an advantage to a wrestler in trying to hold an opponent.

(5 marks)

Question 6

Consider a diver performing a tucked backward one-and-one–half somersault. Explain why performing a dive in a tucked position is easier than performing it in an extended position.

(5 marks)

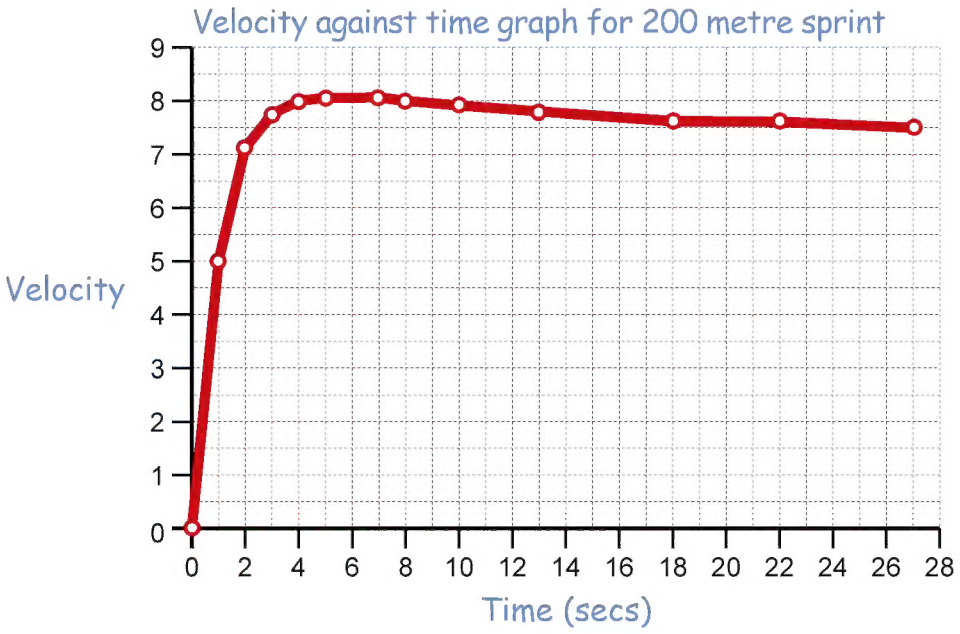
Part 1A Linear Motion

Question 1 The table below shows the velocities of an 18 year old female sprinter during a 200 metre race.

velocity/ms^{-1}	time/seconds
0.0	0
5.0	1
7.1	2
7.8	3
8.0	4
8.1	5
8.1	7
8.0	8
7.9	10
7.8	13
7.7	18
7.6	22
7.5	27

a Plot a graph of velocity against time during this race.

(4 marks)



4 marks for: Axes correct and scaled;
Axes and title correctly labelled;
Points plotted accurately;
Curve drawn;

Question 1 *continued*

b When does she reach maximum velocity?

(1 mark)

1 mark *6 seconds (5-7 seconds);*

c What happens to her velocity between 8 and 27 seconds?

(1 mark)

1 mark *Decreases/slows down/decelerates;*

d Use the graph to establish her velocity at 0.5 seconds and 1.5 seconds.

(2 marks)

2 marks *At 0.5 secs velocity = 2.1 ms^{-2} (2.0-2.3ms^{-2});*

At 1.5 secs velocity = 5.8ms^{-2} (5.6-5.9ms^{-2});

Mark Scheme

Part 1B Forces and Newtons Laws

Question 2

Consider a performer in the 'get set' position, about to start a swimming race. Use this situation to explain Newton's three Laws of Motion.

(6 marks)

6 marks *(First Law, Law of inertia) - body remains in state of motion until acted upon by external force;*

Swimmer remains stationary until a force causes them to change their motion;

(Second Law, law of acceleration) - body accelerates with a magnitude (and direction;)

that is dependent on the magnitude (and direction;) of the force causing the change in motion;

n.b. **only 1 mark if direction not mentioned,**

2 marks if includes direction

Swimmer legs contract and force of contraction governs magnitude of acceleration;

(Third Law, law of reaction) - to every force there is an equal and opposite reaction force;

Swimmer's muscular contractions are a force applied to the ground/box;

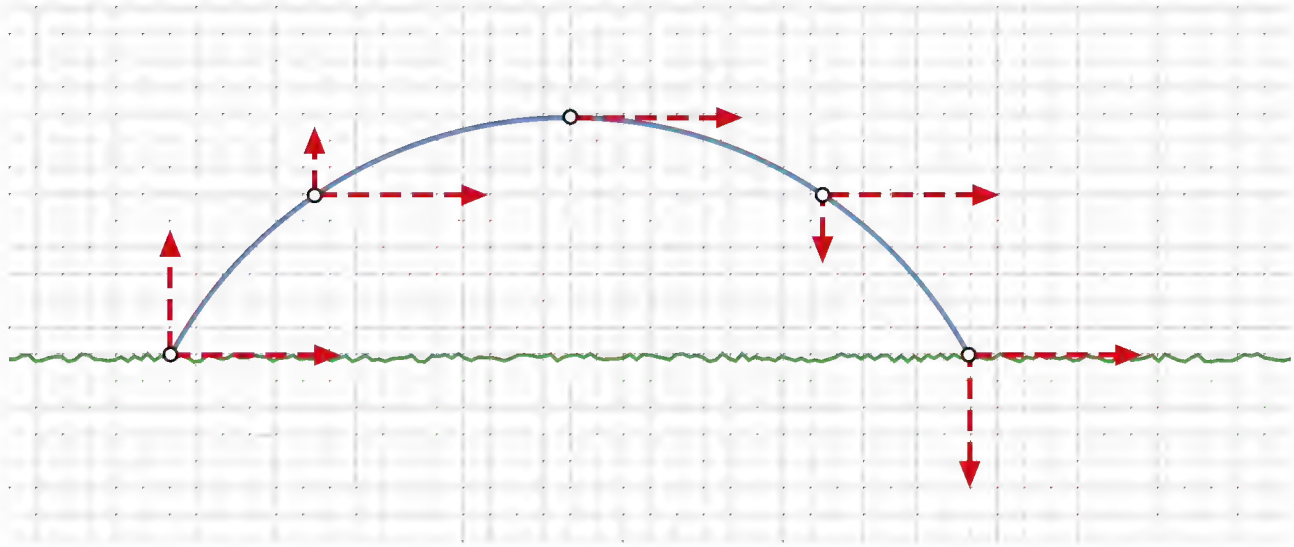
Equal and opposite reaction force applied to the swimmer from the ground;

Mark Scheme

Part 1C Impulse, Net forces and Projectile Motion

Question 3

The following diagram shows the horizontal and vertical velocity components during the flight of a projectile.



a Use the information from the diagram to explain how the magnitude of;

i the vertical component varies during flight.

(3 marks)

3 marks *Magnitude decreases to zero and then becomes negative;*

Effects of gravity acting in downward direction;

Landing component equal and opposite take off component;

ii the horizontal component varies during flight.

(2 marks)

2 marks *No/negligible net external force affecting component;*

Horizontal component remains constant;

Question 3 *continued*

b Explain how various factors affect the horizontal distance achieved by a projectile.

(5 marks)

5 marks

Factors = speed of release, angle of release, height of release;

Faster speed of release - greater distance achieved;

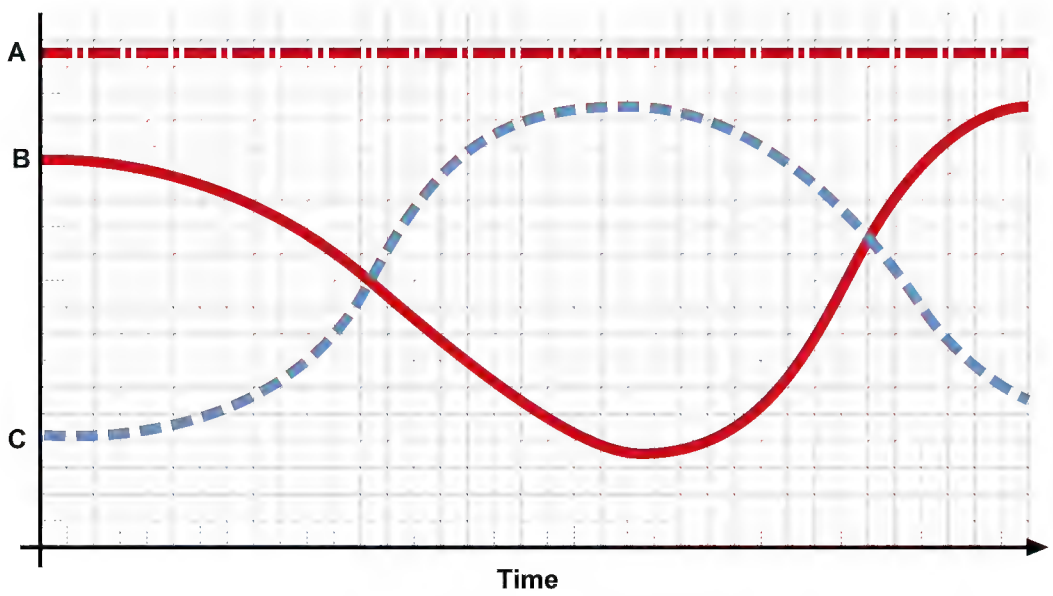
Angle of release 45° for greatest distance;

Higher above landing release takes place - greater distance;

Projectile in air longer - more horizontal distance;

Part 1D Angular motion

Question 4 The following graph shows how three parameters, *angular momentum*, *angular velocity* and *moment of inertia*, change during the performance of a tucked one and a half front somersault dive.



a Which letters correspond to each of the parameters named?

(3 marks)

3 marks

A = Angular momentum;

B = Moment of inertia;

C = Angular velocity;

b Explain how each of the parameters varies during the dive.

(6 marks)

any 6 for 6 marks

Angular momentum remains constant;

No (negligible) net forces acting;

Angular momentum = angular velocity x moment of inertia;

Moment of inertia large at beginning and end of dive;

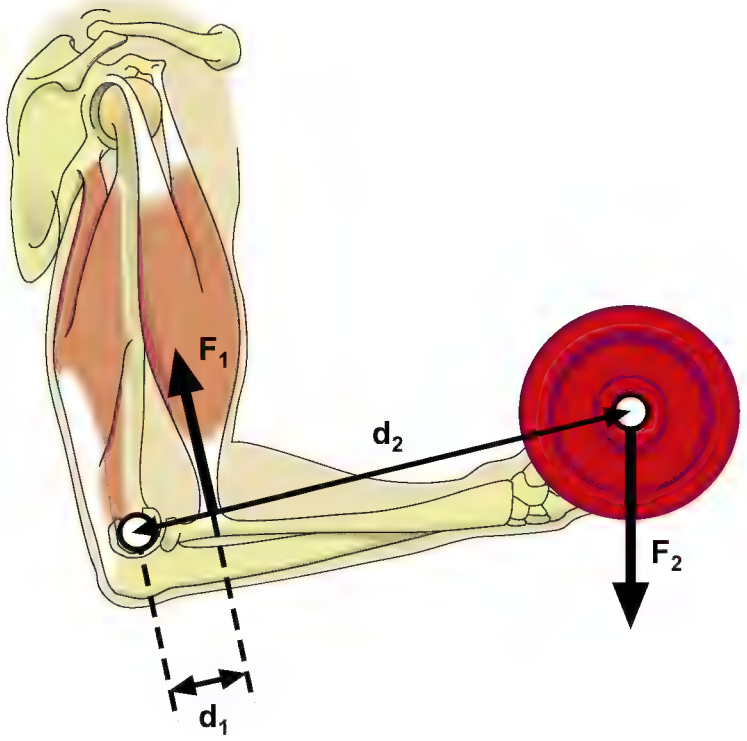
Moment of inertia reduces as performer adopts tucked position in middle of dive;

Hence angular velocity increases during middle of dive;

Angular velocity decreases at beginning and end of dive;

Question 5

Wrestling is a sport that involves strength, and this strength is often applied through isometric muscle contractions, and thus elite wrestlers will train using this type of strength training. The following diagram represents the situation of a wrestler performing an exercise where the forearm is held flexed supporting a dumb-bell – a static or isometric biceps curl. A situation which may be repeated during a wrestling hold.



a The system in the diagram is said to be in angular equilibrium. Explain what you understand by this term.

(2 marks)

2 marks *Zero net forces/net effects of turning forces/moment of a force tending to rotate in one direction are equal to net effects of turning forces tending to rotate in other direction;*

Force x moment arm in one direction = force x moment arm in opposite direction;

Question 5 *continued*

b In the diagram, the moment of a force is equal to the magnitude of the force multiplied by the perpendicular distance between line of force and the axis/pivot. Explain how the moments of the forces involved in figure 2 could be altered, and how this would provide an advantage to a wrestler in trying to hold an opponent.

(5 marks)

max 5 marks

Sub max 4 marks

Alter force being applied by muscle;

Cannot alter length of distance from joint to muscle/moment arm;

Difficult to /cannot alter length of moment arm to resistance/load/weight;

Force applied at resistance depends on gravity/remains constant during exercise;

Force may alter during performance;

Sub max 2 marks

More muscular force applied leads to greater turning force/moment of force;

Which in turn leads to greater resistive turning force/moment of force;

Mark Scheme

Question 6

Consider a diver performing a tucked backward one-and-one–half somersault. Explain why performing a dive in a tucked position is easier than performing it in an extended position.

(5 marks)

5 marks

In air angular momentum remains constant;

Angular momentum = angular velocity x moment of inertia;

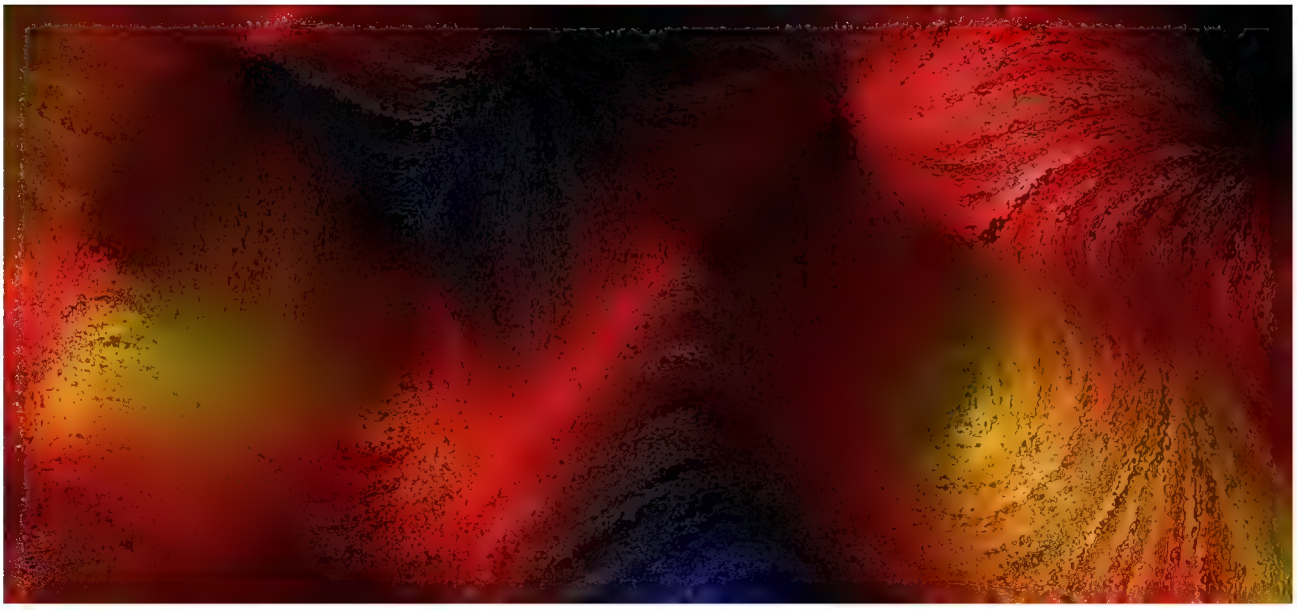
Change moment of inertia/make moment of inertia smaller and angular velocity changes/gets bigger;

Tucked somersault has smaller moment of inertia than extended;

Hence rotation/angular velocity is quicker in tucked somersault and easier to do;

Questions

Part 2 Differences in Fitness Measures



Part 2A Training Effects

Question 7

The following table shows the effects of altitude on the partial pressure of oxygen in the lungs and the percentage saturation of haemoglobin in arterial blood.

Altitude (feet)	Partial pressure of oxygen in lungs (mm Hg)	Percentage saturation of haemoglobin in arterial blood (%)
Sea level	105.0	98
5000	87.0	95
7200	79.5	92
10,000	71.2	90

a Use the information in the table to explain the effects that altitude has on elite performance.

(3 marks)

b For an elite performer, comment on the physiological effects of a period of training whilst at altitude and on overall performance both at altitude and on return to sea level.

(5 marks)

Questions

Part 2B Differences in Fitness Measures Between Groups

Question 8

a What are the main structural and physiological reasons for the observed differences between male and female athletic performances?

(4 marks)

b How do these differences affect performance?

(3 marks)

Part 2A Training Effects

Question 7

The following table shows the effects of altitude on the partial pressure of oxygen in the lungs and the percentage saturation of haemoglobin in arterial blood.

Altitude (feet)	Partial pressure of oxygen in lungs (mm Hg)	Percentage saturation of haemoglobin in arterial blood (%)
Sea level	105.0	98
5000	87.0	95
7200	79.5	92
10,000	71.2	90

a Use the information in the table to explain the effects that altitude has on elite performance.

(3 marks)

3 marks

Increasing altitude means decreasing percentage saturation of haemoglobin;

Hence less oxygen available to muscles;

Hence deteriorating performance in endurance events;

b For an elite performer, comment on the physiological effects of a period of training whilst at altitude and on overall performance both at altitude and on return to sea level.

(5 marks)

any 5 for 5 marks

Training at altitude/low pO_2 causes production of more red blood cells;

Hence more haemoglobin available to carry oxygen on return to sea level;

Hence improved endurance performance;

However, problem of being unable to train at high intensities at altitude;

Because of lack of oxygen may lose fitness at altitude;

Hence poorer performance on return to sea level;

Part 2B Differences in Fitness Measures Between Groups

Question 8

a What are the main structural and physiological reasons for the observed differences between male and female athletic performances?

(4 marks)

any 4 for 4 marks

Males have:

Less fat;

Larger skeletal frame;

Longer levers;

Bigger muscles;

Larger heart;

More blood/haemoglobin

Higher VO_2 max;

More testosterone/strength training potential;

b How do these differences affect performance?

(3 marks)

any 3 for 3 marks

Increase stamina;

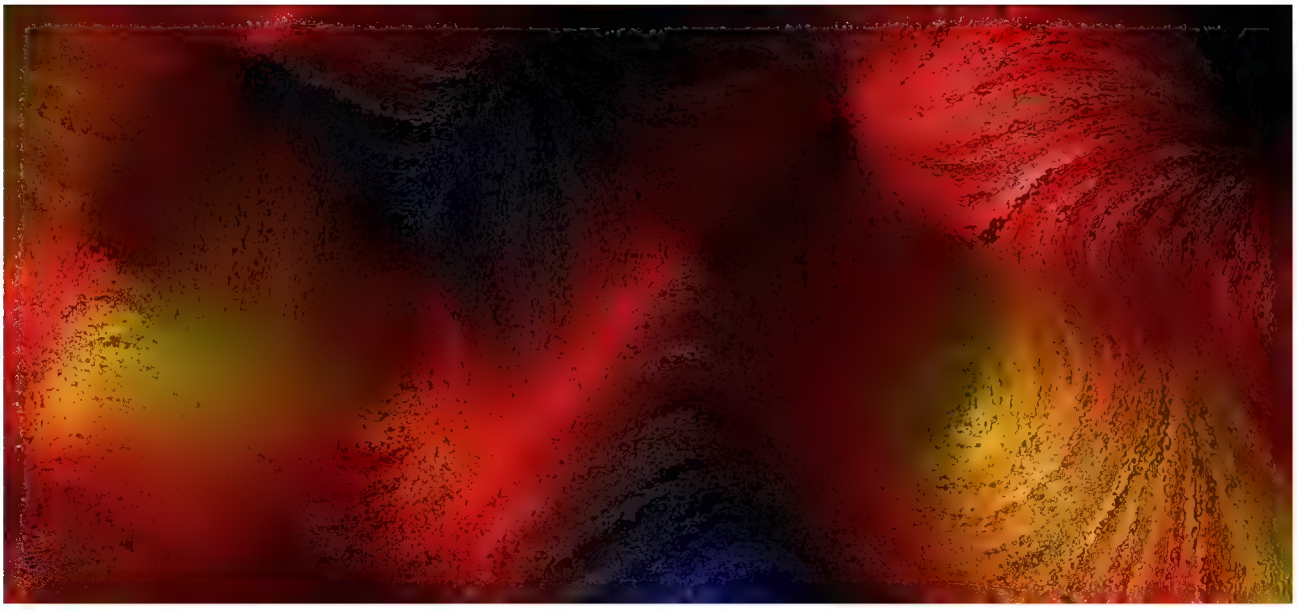
Increase strength;

Increase speed;

Increase power;

Questions

Part 3 Energy Concepts



Part 3A Energy sources

Question 9

Complete the following table by filling gaps marked with an asterisk on the major characteristics of energy systems and their relation to the speed of running:

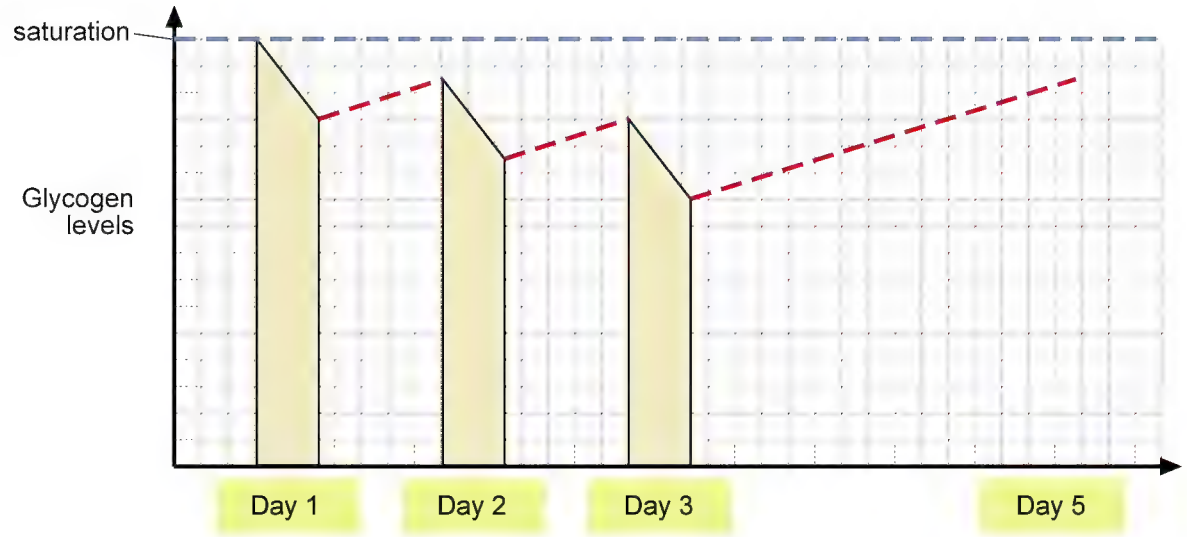
(9 marks)

ATP/PC system	Lactic acid system	Aerobic (oxygen) system
*	Anaerobic	Aerobic
Very rapid	*	*
Chemical fuel: PC	Food Fuel: *	Food fuel: *
*	Limited production of energy	*
Muscular stores limited – fatigue through depletion	By-product, lactate causes fatigue	*
Used with sprints or any high power activities up to 10 seconds	*	Used with endurance or long endurance activities over 2-3 minutes

Part 3B Muscle fatigue

Question 10

The following diagram shows the effects of daily 10 mile runs on the levels of glycogen in muscles.



a Explain what the diagram shows, and briefly explain the role of glycogen in endurance performance.

(4 marks)

b How could elite endurance performers try to artificially increase their glycogen stores in an attempt to improve performance?

(2 marks)

Part 3C ATP-PC system

Question 11

In an experiment, a subject exercised to exhaustion, and then during his recovery, the levels of phosphocreatine (PC) in his muscles were measured as a percentage of the original (pre-exercise) levels of PC. The results were as follows:

Recovery Time (seconds)	Percentage of phospho creatine restored
10	10
30	50
60	75
90	87
120	93
150	97
180	99
210	101
240	102

a Plot a graph of these results, with recovery time on the x-axis, and percentage of PC restored on the y-axis.

(3 marks)

b What length of rest would you suggest for a full recovery?

(1 mark)

c If a period of intense exercise that lasts for 10 seconds causes the levels of PC to be reduced by 50%, sketch a graph, with time on the x-axis, and % PC on the y-axis, which shows that period of exercise followed by a full recovery.

(2 marks)

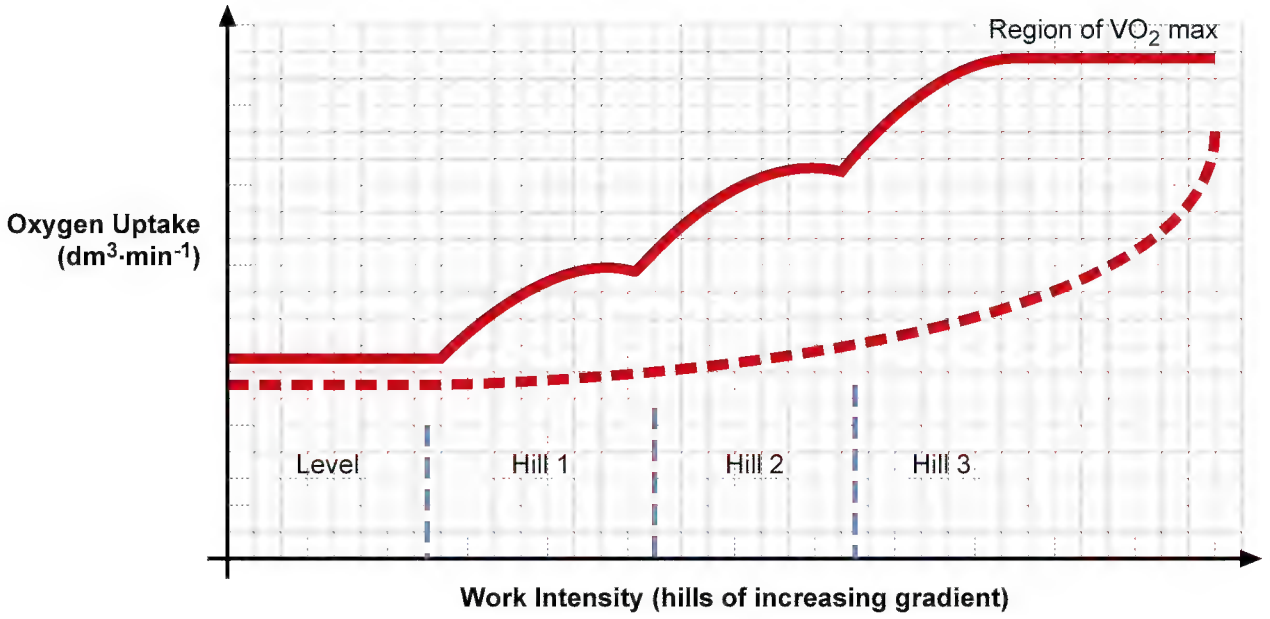
d Sketch another graph that shows three periods of intense exercise, each lasting 10 seconds, where each exercise period is followed by a 30-second recovery.

(2 marks)

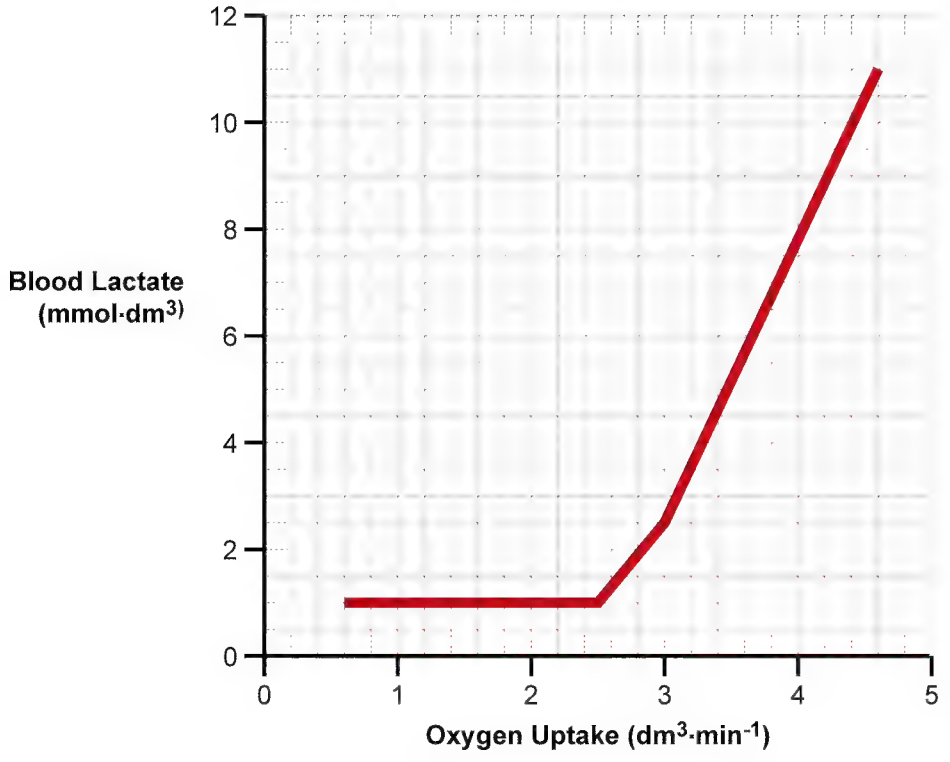
Part 3D Lactate anaerobic system

Question 12

The graph below shows the relationship between an increase in intensity of exercise and oxygen uptake.



The following graph shows how blood lactate concentration varies with oxygen uptake, as the performer undertakes increasingly intense exercise.



Question 12 *continued*

Using the information provided explain how the energy systems used vary with the intensity of exercise. What will be the eventual outcome of continued high intensity exercise?

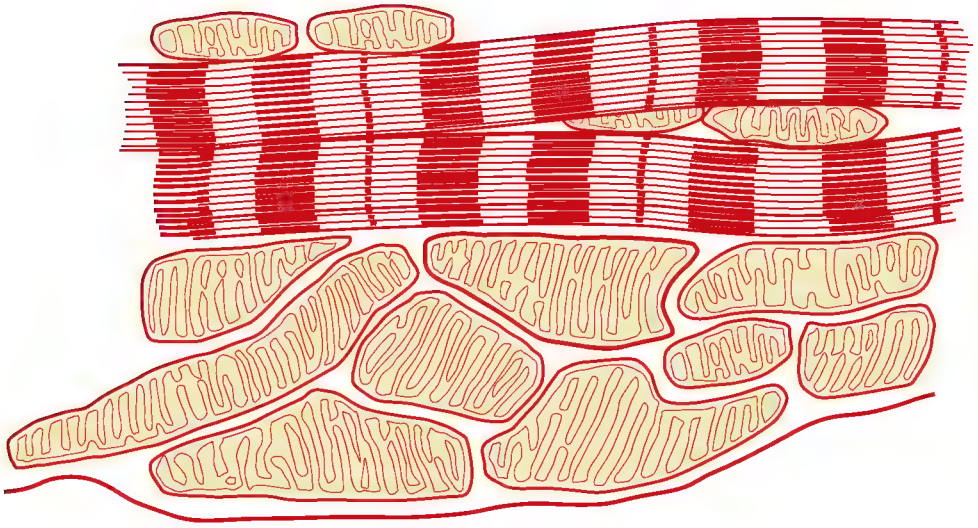
(5 marks)

Questions

Part 3E Aerobic systems

Question 13

The diagram shows some slow-twitch, type I, muscle fibres.



a Comment on the number and distribution of the mitochondria with respect to the role of this type of muscle fibre in exercise.

(3 marks)

b Briefly describe the role of mitochondria in the breakdown of carbohydrates and fats in cellular respiration.

(4 marks)

Mark Scheme

Part 3A Energy sources

Question 9

Complete the following table by filling in the gaps marked with an asterisk on the major characteristics of energy systems their relation to the speed of running:

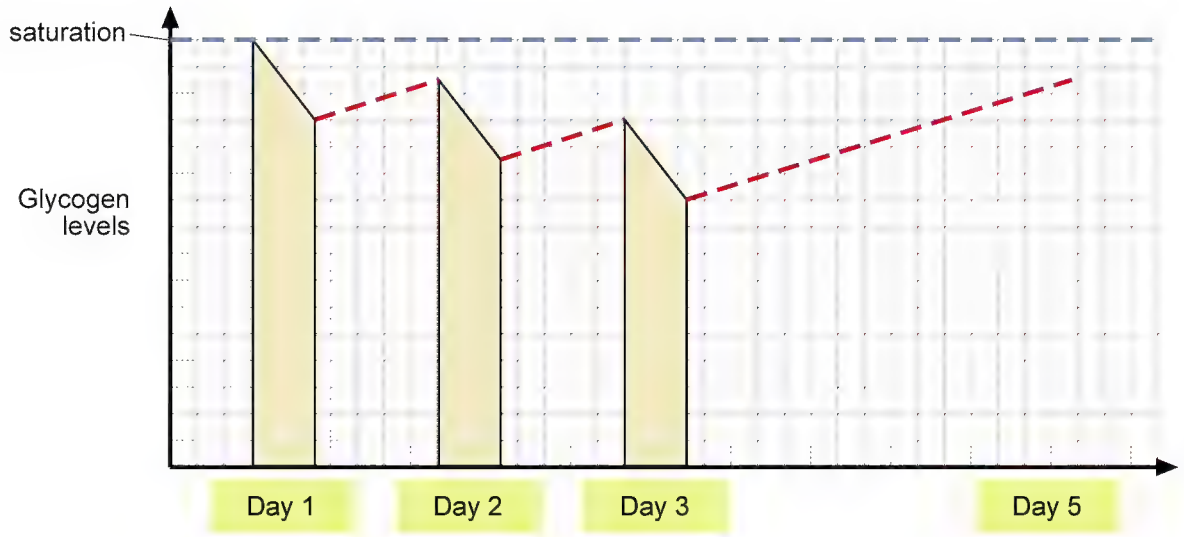
(9 marks)

ATP/PC system	Lactic acid system	Aerobic (oxygen) system
*Anaerobic;	Anaerobic	Aerobic
Very rapid	*Rapid;	*Slow;
Chemical fuel: PC	Food Fuel: *glycogen/glucose	Food fuel: *glycogen/glucose/fat
*(very) Limited production;	Limited production of energy	*Unlimited production;
Muscular stores limited – fatigue through depletion	By-product, lactate causes fatigue	*No fatigue;
Used with sprints or any high power activities up to 10 seconds	*Used in high intensity, long duration (30-150 secs) activities;	Used with endurance or long endurance activities over 2-3 minutes

Part 3B Muscle fatigue

Question 10

The following diagram shows the effects of daily 10 mile runs on the levels of glycogen in muscles.



a Explain what the diagram shows, and briefly explain the role of glycogen in endurance performance.

(4 marks)

any 4 for 4 marks

Shows that levels of stored glycogen are depleted during 10 mile run;

Limited glycogen stores;

1 day/24 hours insufficient time for replenishment;

Provides energy for ATP resynthesis;

Through oxidation to CO_2 and water;

Question 10 *continued*

b How could elite endurance performers try to artificially increase their glycogen stores in an attempt to improve performance?

(2 marks)

2 **marks**

Either – *Dietary manipulation- 3-4 days prior to competition ingest no carbohydrates; Day before competition - high carbohydrate diet, eg pasta;*

Or – *Exercise plus diet - 4-6 days prior to competition take exhausting run; Maintain low carbohydrate diet until day before competition;*

Part 3C ATP-PC system

Question 11

In an experiment, a subject exercised to exhaustion, and then during his recovery, the levels of phosphocreatine (PC) in his muscles were measured as a percentage of the original (pre-exercise) levels of PC. The results were as follows:

Recovery Time (seconds)	Percentage of phospho creatine restored
10	10
30	50
60	75
90	87
120	93
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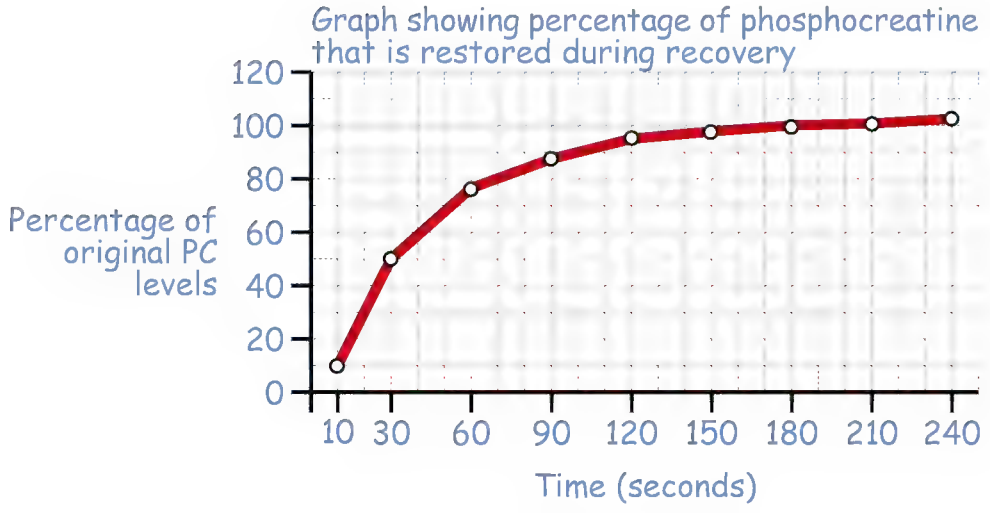
210	101
240	102

a Plot a graph of these results, with recovery time on the x-axis, and percentage of PC restored on the y-axis.

(3 marks)



any 3 for 3 marks Title to graph and axes;

Axes correct way round and to scale;

Points accurately plotted;

Question 11 *continued*

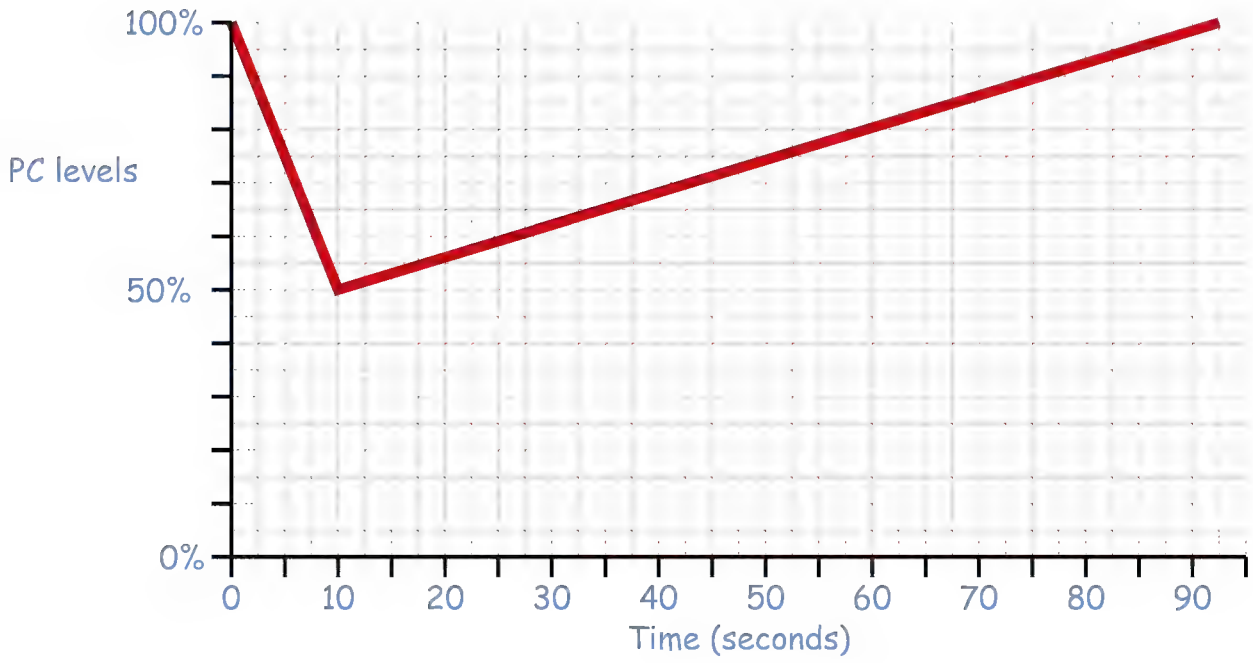
b What length of rest would you suggest for a full recovery?

(1 mark)

1 mark *3 minutes/180 seconds;*

c If a period of intense exercise that lasts for 10 seconds causes the levels of PC to be reduced by 50%, sketch a graph, with time on the x-axis, and % PC on the y-axis, which shows that period of exercise followed by a full recovery.

(2 marks)



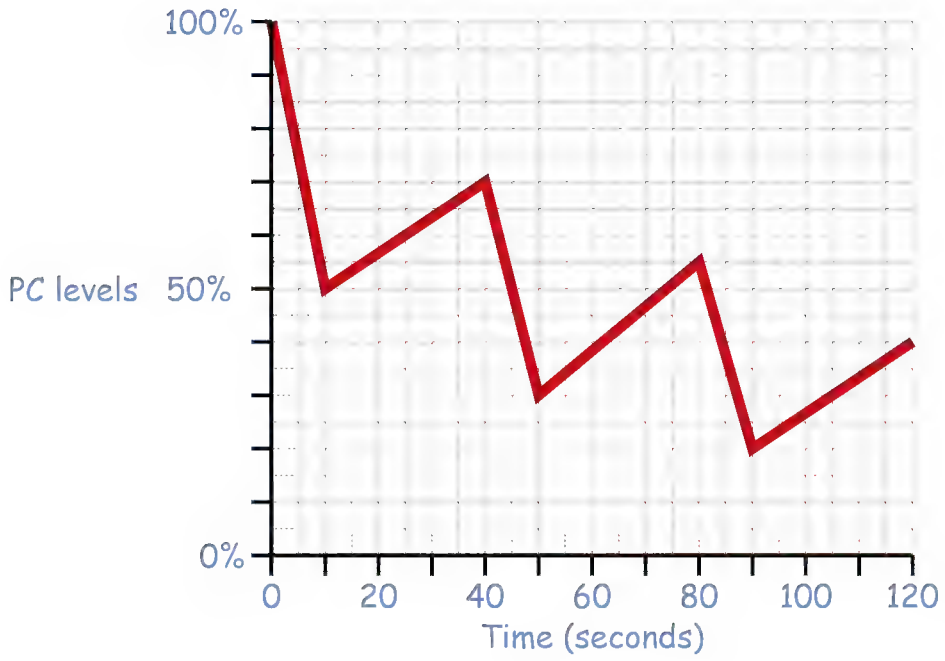
2 marks for Correct axes;

Correct shape;

Question 11 *continued*

d Sketch another graph that shows three periods of intense exercise, each lasting 10 seconds, where each exercise period is followed by a 30-second recovery.

(2 marks)



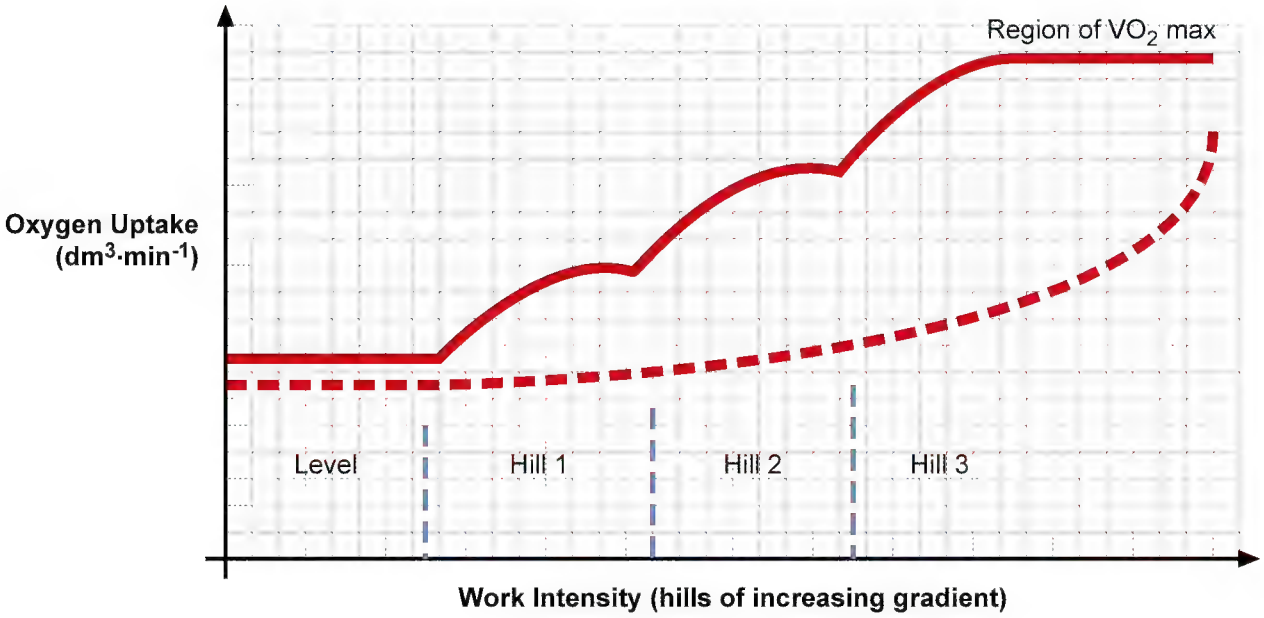
2 marks Incomplete recovery shown;

Reducing PC levels shown;

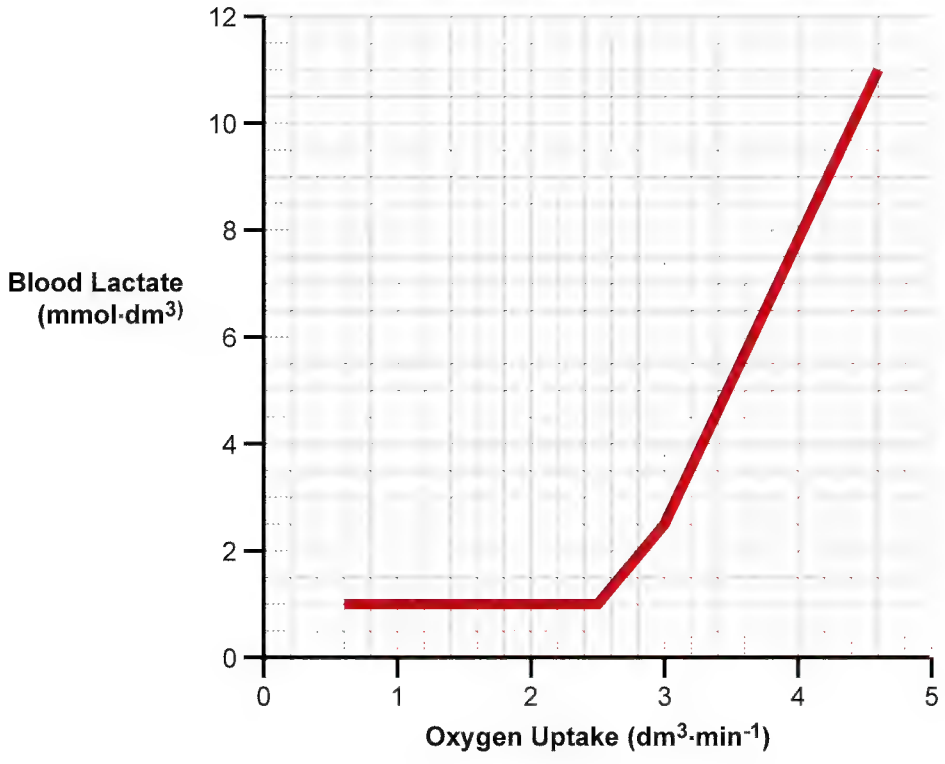
Part 3D Lactate anaerobic system

Question 12

The graph below shows the relationship between an increase in intensity of exercise and oxygen uptake.



The following graph shows how blood lactate concentration varies with oxygen uptake, as the performer undertakes increasingly intense exercise.



Question 12 *continued*

Using the information provided explain how the energy systems used vary with the intensity of exercise. What will be the eventual outcome of continued high intensity exercise?

(5 marks)

any 5 for 5 marks

Low intensity - uses aerobic system;

Pyruvate into mitochondria;

Lots of ATP for energy produced;

Carbon dioxide and water as waste products;

Use of oxygen;

High intensity - uses anaerobic glycolysis;

Some ATP for energy produced;

Pyruvate converted in lactate;

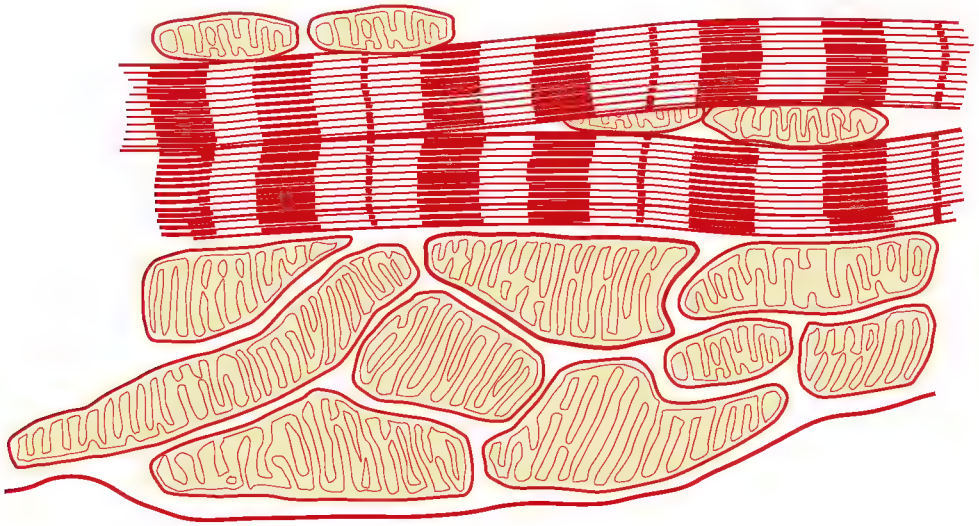
Accumulation leads to fatigue;

Mark Scheme

Part 3E Aerobic systems

Question 13

The diagram shows some slow-twitch, type I, muscle fibres.



a Comment on the number and distribution of the mitochondria with respect to the role of this type of muscle fibre in exercise.

(3 marks)

3 marks

Large numbers;

Close to/aligned with fibres;

Link to aerobic energy supply;

b Briefly describe the role of mitochondria in the breakdown of carbohydrates and fats in cellular respiration.

(4 marks)

any 4 for 4 marks

Pyruvate from carbohydrates into mitochondria;

Fats from beta oxidation into mitochondria;

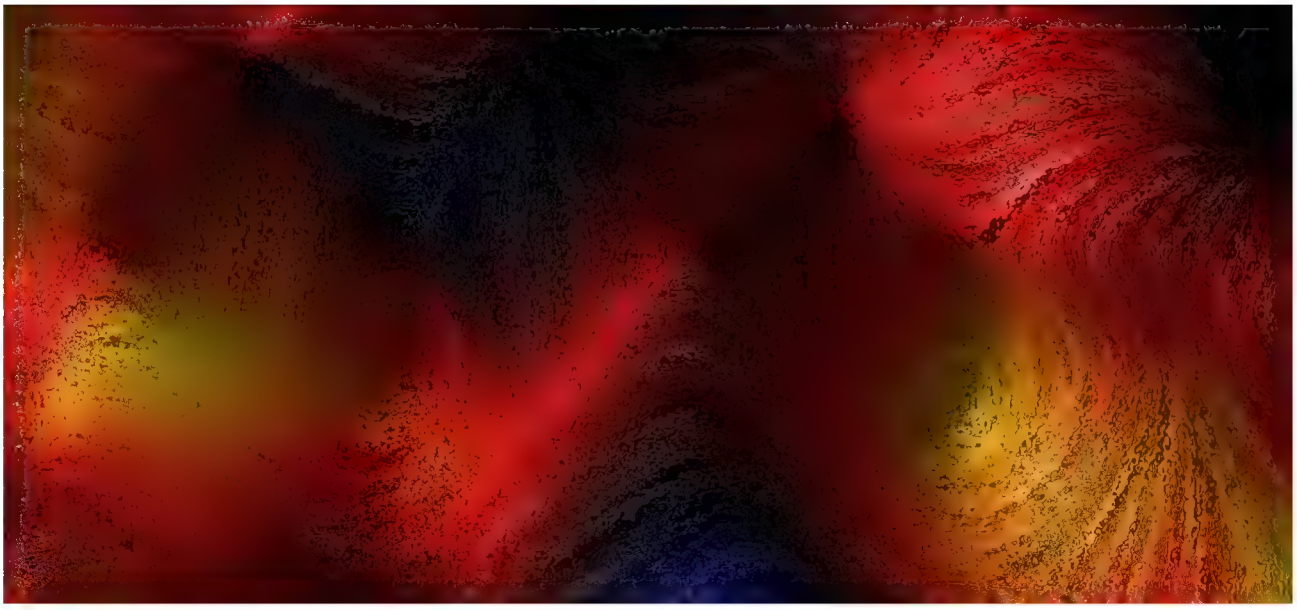
Breakdown to carbon dioxide and water;

Use of oxygen;

Lots of ATP formed;

Questions

Part 4 Performance Criteria

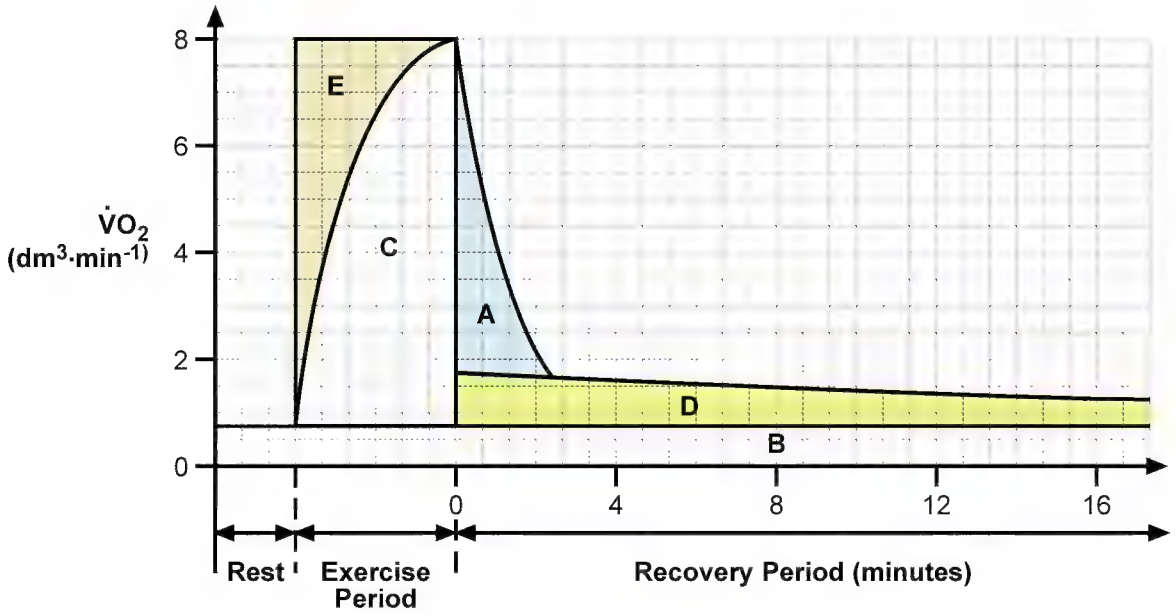


Part 4A Excess Post-exercise Oxygen Consumption

Question 14

a In the following graph, what do the letters A, B, C, D and E represent?:

(5 marks)



b In terms of recovery, what happens during areas A and D?

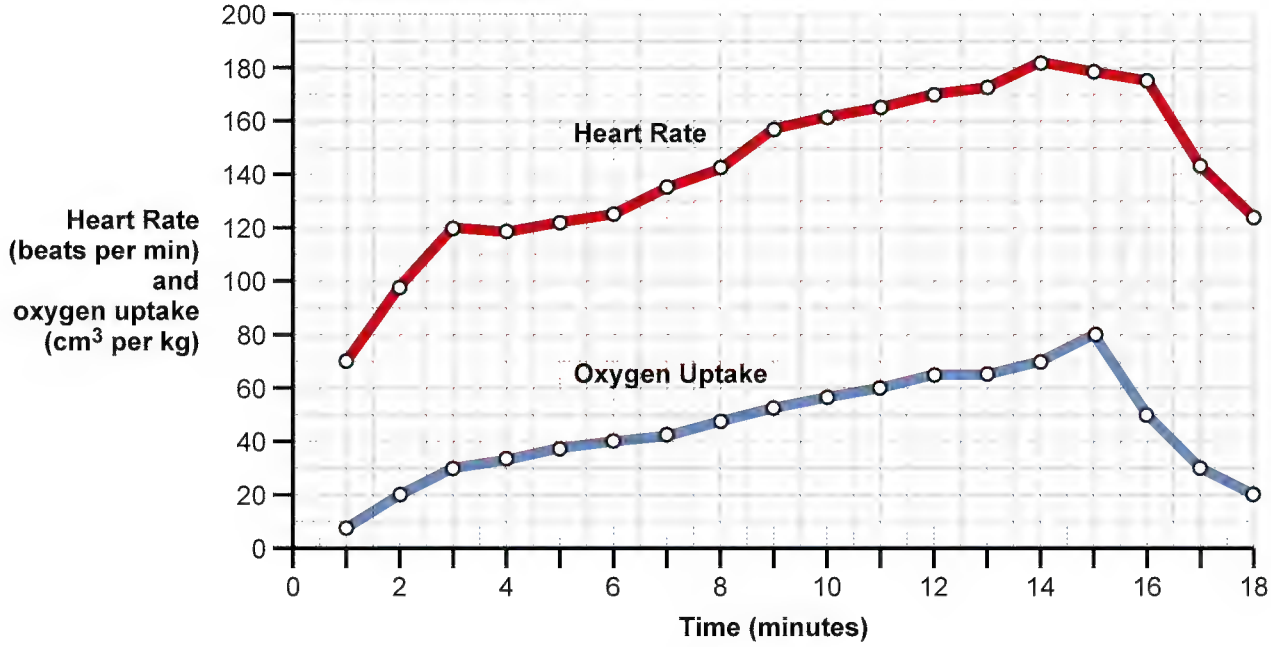
(4 marks)

Part 4B Maximal Oxygen Consumption

Question 15

One aspect of a good attitude to sport is a willingness to train and subject oneself to regular testing to see if improvements are occurring. The following graph shows oxygen uptake of a middle distance runner during a period of **sub-maximal** treadmill running.

Heart rate and oxygen uptake recordings of a middle distance runner performing a maximal treadmill test.



a This graph does not show the $\dot{V}O_2$ max of this performer? What evidence is there to support this?

(2 marks)

b During recovery from such a bout of exercise, Excess Post-exercise Oxygen Consumption (EPOC) occurs. Explain the differing functions of the fast and the slow components of EPOC, and how EPOC varies with intensity of exercise.

(7 marks)

Part 4C Lactate threshold

Question 16

Many elite swimmers use blood lactate sampling during training as a means of establishing their training load.

a What do you understand by the term lactate threshold?

(2 marks)

b How is lactate threshold related to $\dot{V}O_2$ max?

(2 marks)

c Explain how knowing blood lactate levels during a swim might assist an elite performer.

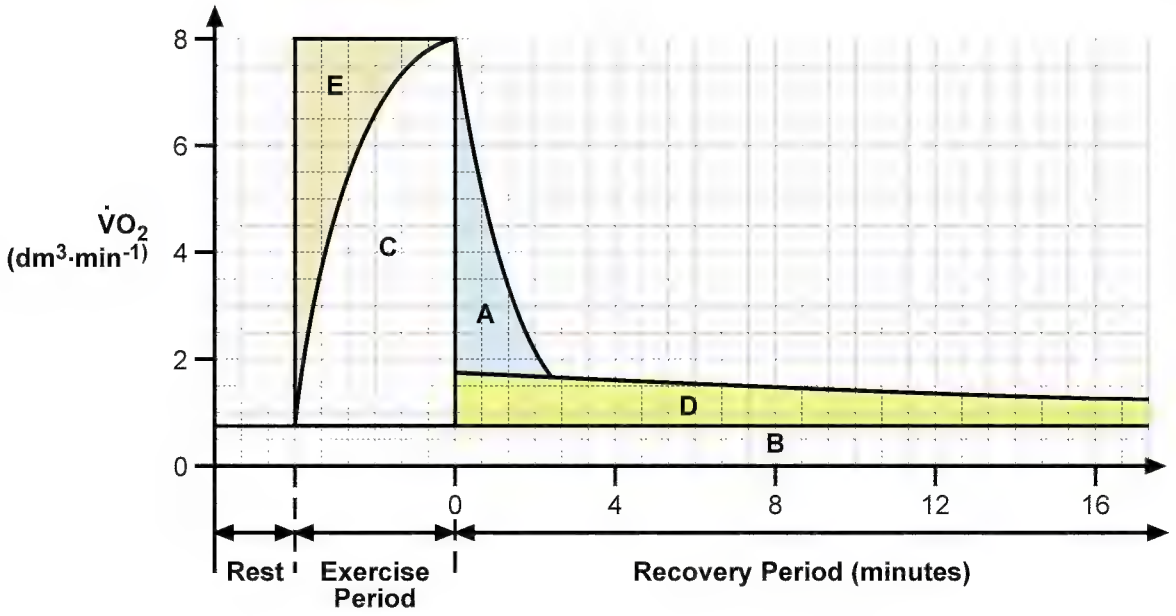
(2 marks)

Part 4A Excess Post-exercise Oxygen Consumption

Question 14

a In the following graph, what do the letters A, B, C, D and E represent?:

(5 marks)



5 marks

A - fast component of EPOC;

B - resting oxygen consumption;

C - oxygen consumption during exercise;

D - slow component of EPOC;

E - oxygen deficit;

b In terms of recovery, what happens during areas A and D?

(4 marks)

4 marks

Fast - restoration of PC levels;

Resaturation of myoglobin;

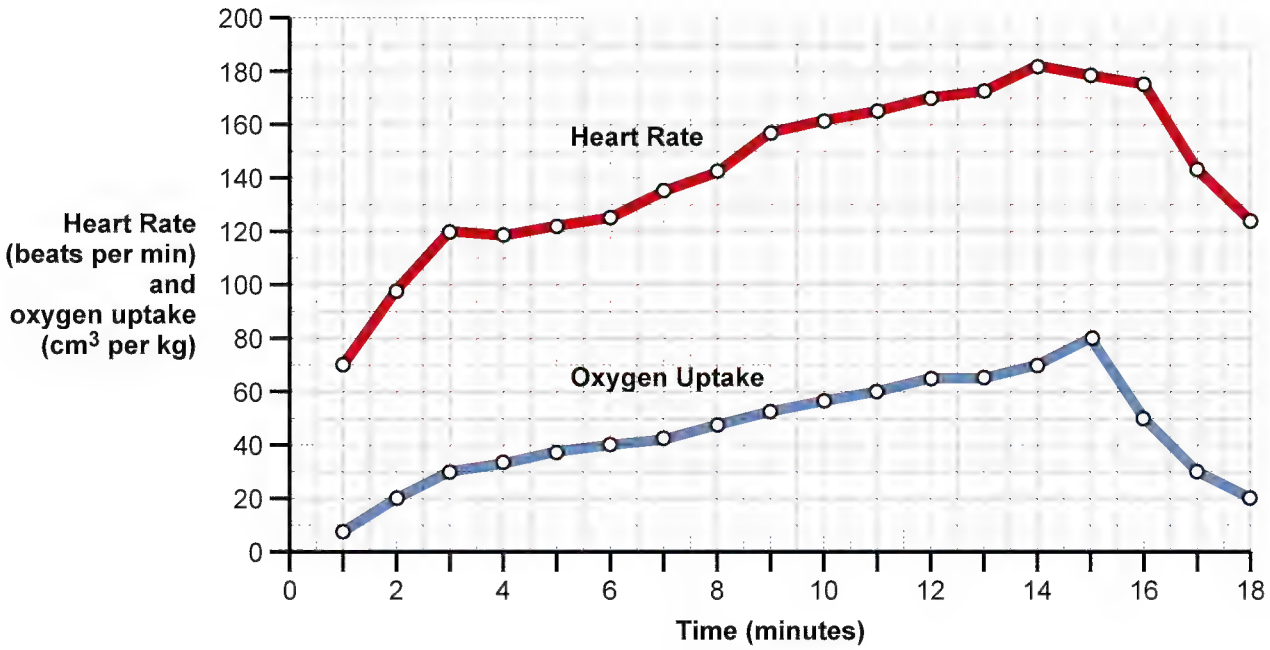
Slow - removal of lactate from blood;

Oxygen consumed to maintain high metabolic rates;

Part 4B Maximal Oxygen Consumption

Question 15 One aspect of a good attitude to sport is a willingness to train and subject oneself to regular testing to see if improvements are occurring. The following graph shows oxygen uptake of a middle distance runner during a period of **sub-maximal** treadmill running.

Heart rate and oxygen uptake recordings of a middle distance runner performing a maximal treadmill test.



a This graph does not show the VO^2 max of this performer? What evidence is there to support this?

(2 marks)

2 marks for *No plateau/levelling out*

Sub-maximal exercise;

Question 15 *continued*

b During recovery from such a bout of exercise, Excess Post-exercise Oxygen Consumption (EPOC) occurs. Explain the differing functions of the fast and the slow components of EPOC, and how EPOC varies with intensity of exercise.

(7 marks)

max of 7 marks

sub max 2 marks

Fast component - Restoration of ATP/PC levels;

Resaturation of oxygen with myoglobin;

sub max 4 marks

Slow component - Removal of Lactate/lactic acid;

By oxidation/energy production in other organs (liver)/muscles;

Conversion to glycogen (glucose);

Some converted to protein/some excreted in sweat and/or urine;

Oxygen used to maintain high work rates of heart/breathing muscles;

Extra oxygen used as temperature remains high;

sub max 2 marks

Rate/slope of recovery varies/steeper slope with higher intensity;

Time to recover varies/more recovery time with higher intensities;

Part 4C Lactate threshold

Question 16 Many elite swimmers use blood lactate sampling during training as a means of establishing their training load.

a What do you understand by the term lactate threshold?

(2 marks)

2 marks *Levels at which lactate/lactic acid accumulates in blood;*

Exercise has become anaerobic;

b How is lactate threshold related to $\dot{V}O_2$ max?

(2 marks)

2 marks *Lactate threshold is some proportion/percentage of $\dot{V}O_2$ max;*

Proportion/percentage increases as fitness increases;

c Explain how knowing blood lactate levels during a swim might assist an elite performer.

(2 marks)

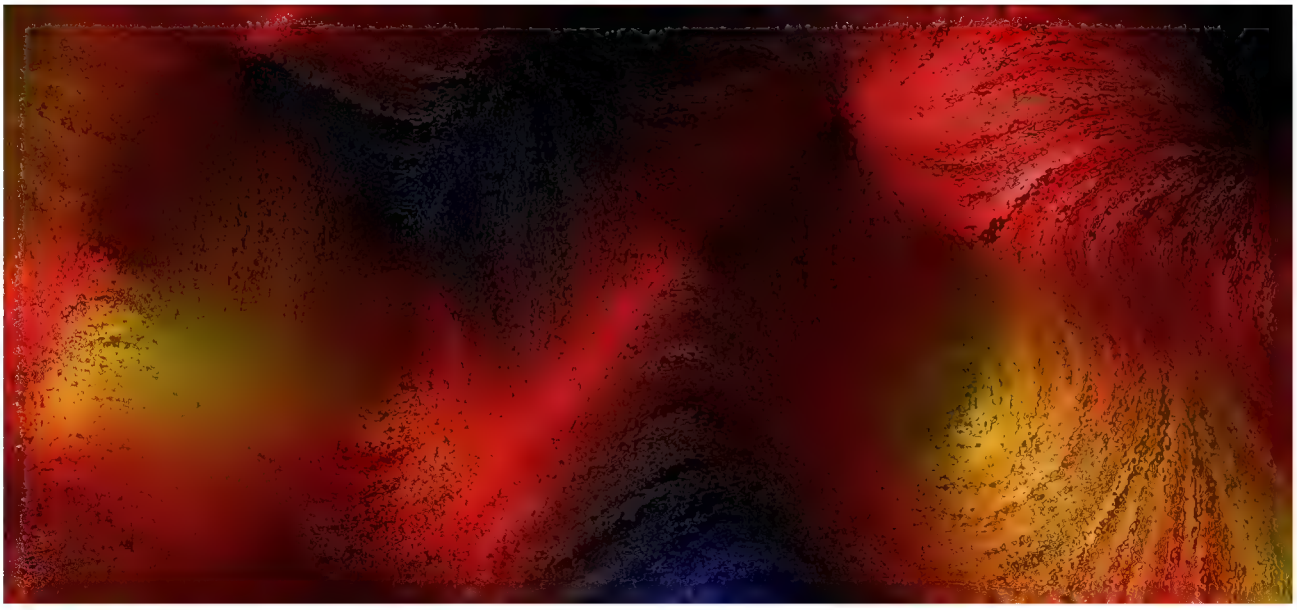
any 2 for 2 marks *Accurately measures intensity of training;*

Elite performers need to train close to their Lactate threshold/$\dot{V}O_2$ max;

Accuracy in determining Lactate threshold/$\dot{V}O_2$ max is difficult;

Questions

Part 5 Motor Units and Control



Part 5A Types of muscle fibres

Question 17

The structural and biochemical characteristics of the predominant muscle fibres used by endurance athletes are different from those used by sprinters.

a Identify four such characteristics.

(4 marks)

b Describe how these characteristics contribute to the differences in performance seen in these two groups of athletes.

(4 marks)

Question 18

Performers in an invasion game such as basketball or netball, will be performing a variety of skills within the game that will demand that they use both fast and slow-twitch muscle fibres.

a Using examples from an invasion game, explain why different types of activity will require the predominant use of different types of muscle fibre.

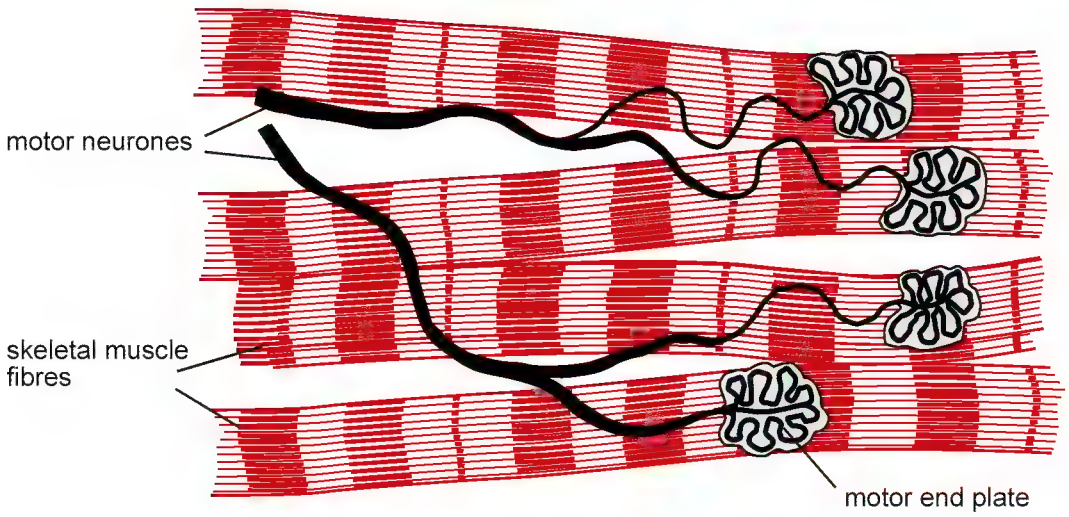
(2 marks)

b List five structural or physiological characteristics of fast-twitch fibres that distinguish them from slow-twitch fibres in terms of their predominant energy systems.

(5 marks)

Part 5B Motor Units

Question 19 The diagram below shows two motor units at a magnification of 800.



a

i What is meant by the term a motor unit?

(1 mark)

ii Use the diagram to help explain why all the muscle fibres shown may not necessarily contract at the same time.

(1 mark)

b In terms of neuro-muscular activity, how are variations in the strength of a muscle contraction achieved.

(5 marks)

Part 5C Proprioceptors and Kinaesthetic Feedback

Question 20

The ability to overcome a resistance is a definition of strength. Plyometric training is commonly used to improve strength.

a What are the main features of plyometric training in terms of muscular contraction?

(2 marks)

b Describe two exercises that could be used as plyometric exercises for a jump athlete.

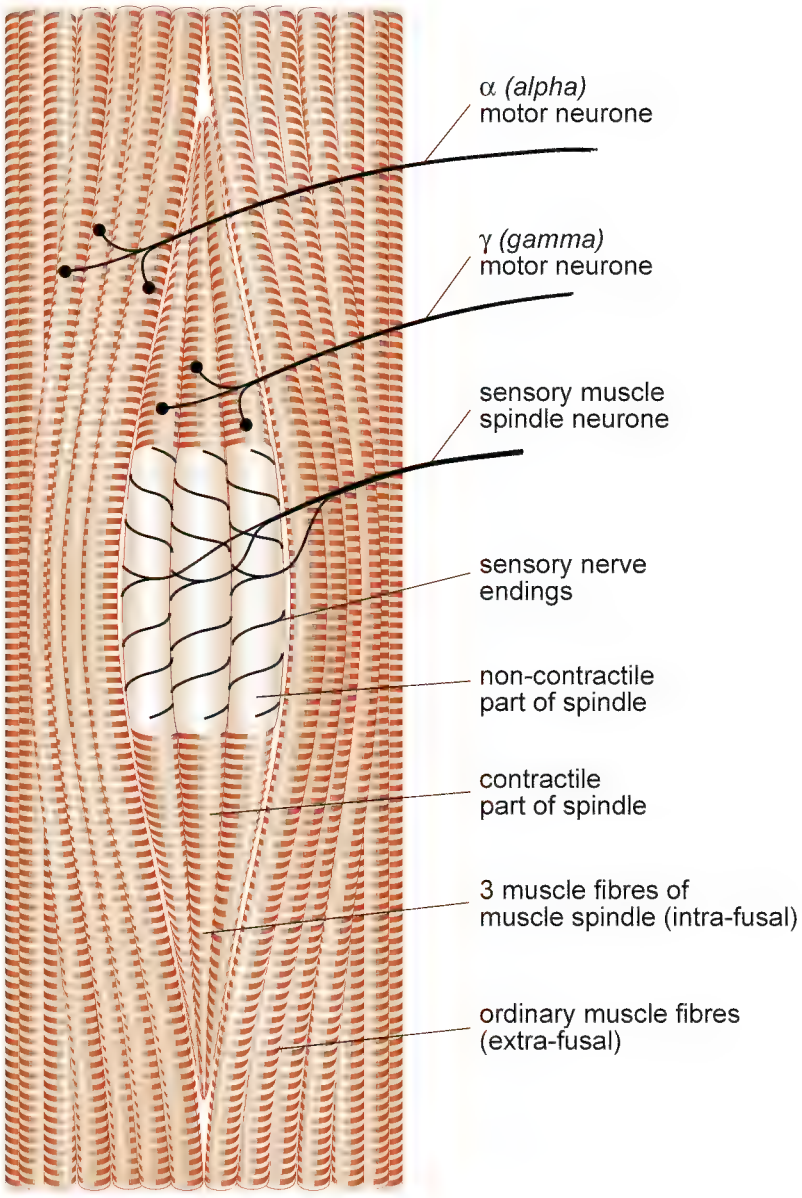
(2 marks)

c Explain the role of the muscle spindle apparatus in facilitating plyometrics.

(3 marks)

Questions

Question 21 The following diagram shows the muscle spindle apparatus.


α (alpha) motor neurone
γ (gamma) motor neurone
sensory muscle spindle neurone
sensory nerve endings
non-contractile part of spindle
contractile part of spindle
3 muscle fibres of muscle spindle (intra-fusal)
ordinary muscle fibres (extra-fusal)

a Use the diagram to explain how this apparatus may be used to adjust the strength of muscle contractions.

(3 marks)

b Explain how the role of the stretch receptors is adapted to allow stretching in proprioceptive neuromuscular facilitation.

(4 marks)

Part 5A

Types of muscle fibres

Question 17

The structural and biochemical characteristics of the predominant muscle fibres used by endurance athletes are different from those used by sprinters.

a Identify four such characteristics.

(4 marks)

any 4 for 4 marks

Endurance - use slow-twitch fibres;

More mitochondria;

More myoglobin;

Less sarcoplasmic reticulum;

Less PC stores;

Less glycogen stores;

High triglyceride stores;

More oxidative enzyme activity;

Less glycolytic enzyme activity;

High fatigue resistance;

b Describe how they contribute to the differences in performance seen in these two groups of athletes.

(4 marks)

4 marks

Myoglobin - Increased availability of oxygen;

Increased availability of triglycerides as substrate;

Mitochondria/more oxidative enzymes - increased use of oxidative metabolism;

Aerobic processes for slow/long duration exercise;

Mark Scheme

Question 18

Performers in an invasion game such as basketball or netball, will be performing a variety of skills within the game that will demand that they use both fast and slow-twitch muscle fibres.

a Using examples from an invasion game, explain why different types of activity will require the predominant use of different types of muscle fibre.

(2 marks)

any 2 for 2 marks

Sprinting/jumping/etc - demands fast, powerful muscle contractions characteristic of fast-twitch fibres;

Continuous running/stamina - demands slower, prolonged/ non-fatiguing characteristics of slow-twitch fibres;

b List five structural or physiological characteristics of fast-twitch fibres that distinguish them from slow-twitch fibres in terms of their predominant energy systems.

(5 marks)

any 5 for 5 marks

Fast motor neurone conduction velocity;

Large muscle fibre diameter;

More sarcoplasmic reticulum development;

Low mitochondrial density;

Low capillary density;

Low myoglobin content;

High PC stores;

High glycogen stores;

Low triglyceride stores;

High myosin ATPase/glycogen enzyme activity;

Low oxidative enzyme activity;

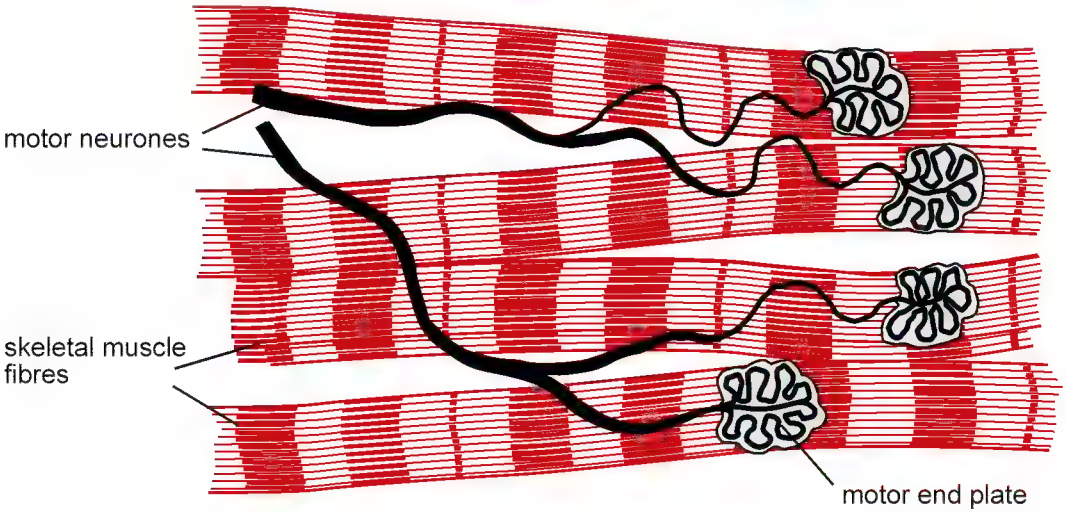
Fast contraction/relaxation time time;

High force production;

Low fatigue resistance;

Part 5B Motor Units

Question 19 The diagram below shows two motor units at a magnification of 800.



a

i What is meant by the term a motor unit?

(1 mark)

1 mark *Motor neurone plus muscle fibres;*

ii Use the diagram to help explain why all the muscle fibres shown may not necessarily contract at the same time.

(1 mark)

1 mark *Two motor neurones;*

b In terms of neuro-muscular activity, how are variations in the strength of a muscle contraction achieved.

(5 marks)

any 5 for 5 marks

Spatial summation;

Use larger motor units to increase strength;

Use more motor units to increase strength;

Wave summation;

Stimulation of fibre before fully relaxed;

Increased force of contraction;

Tetanus;

Part 5C Proprioceptors and Kinaesthetic Feedback

Question 20

The ability to overcome a resistance is a definition of strength. Plyometric training is commonly used to improve strength.

a What are the main features of plyometric training in terms of muscular contraction?

(2 marks)

2 marks

Eccentric contraction;

Followed by concentric contraction;

b Describe two exercises that could be used as plyometric exercises for a jump athlete.

(2 marks)

any 2 for 2 marks

E.g. single or double-legged bounding;

Jumping off and onto boxes;

Depth jumps;

Bunny jumps;

c Explain the role of the muscle spindle apparatus in facilitating plyometrics.

(3 marks)

any 3 for 3 marks

Eccentric phase - activates muscle spindles;

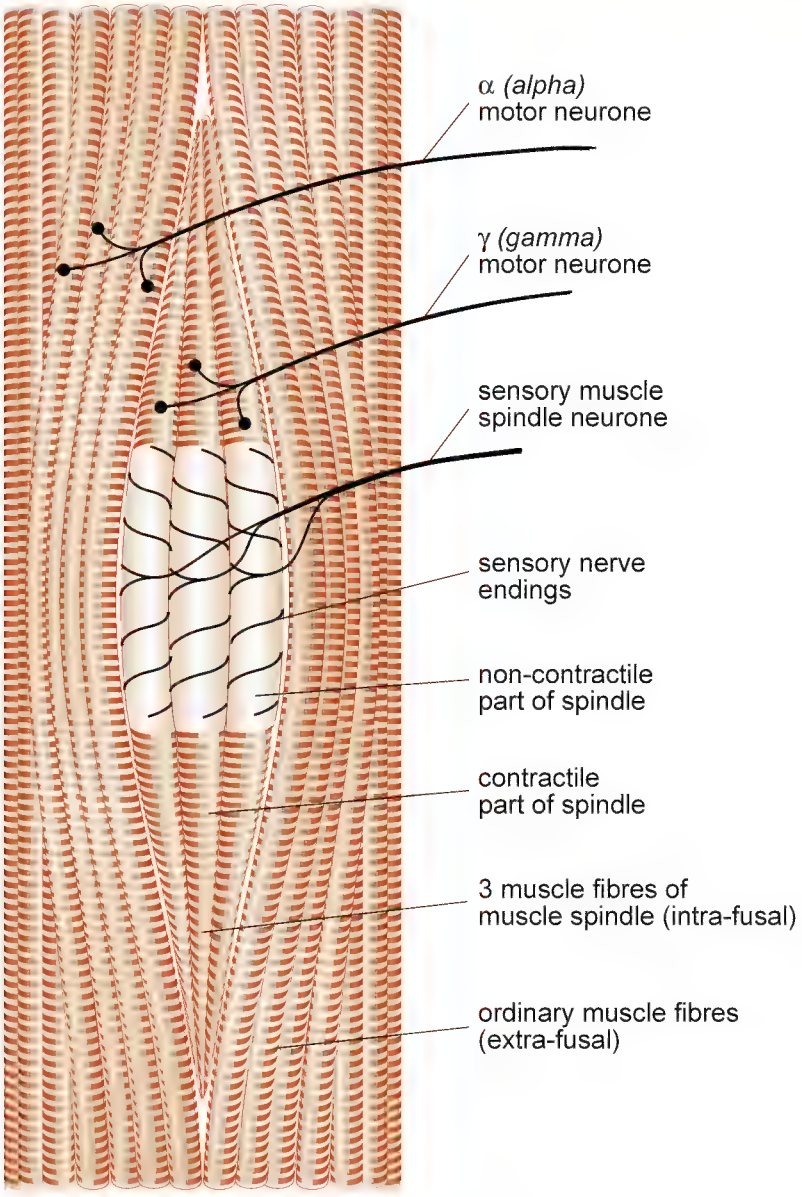
Intrafusal fibres send sensory impulses to brain;

Gamma neurones cause intrafusal fibres to contract;

Add to force of contraction;

More strength/power gained;

Question 21 The following diagram shows the muscle spindle apparatus.


α (alpha) motor neurone
γ (gamma) motor neurone
sensory muscle spindle neurone
sensory nerve endings
non-contractile part of spindle
contractile part of spindle
3 muscle fibres of muscle spindle (intra-fusal)
ordinary muscle fibres (extra-fusal)

a Use the diagram to explain how this apparatus may be used to adjust the strength of muscle contractions.

(3 marks)

3 marks *Contraction or stretching of a muscle results in sensory impulses going to brain concerning state of contraction; Muscle pre-sets tension based on information held in memory (gamma bias); Spindles adjust tension by feedback of information to brain that causes immediate adjustments.;*

Question 21 *continued*

b Explain how the role of the stretch receptors is adapted to allow stretching in proprioceptive neuromuscular facilitation.

(4 marks)

any 4 for 4 marks

Stretch to limit of movement and muscles contracted (isometrically);

For about six seconds then muscles relaxed;

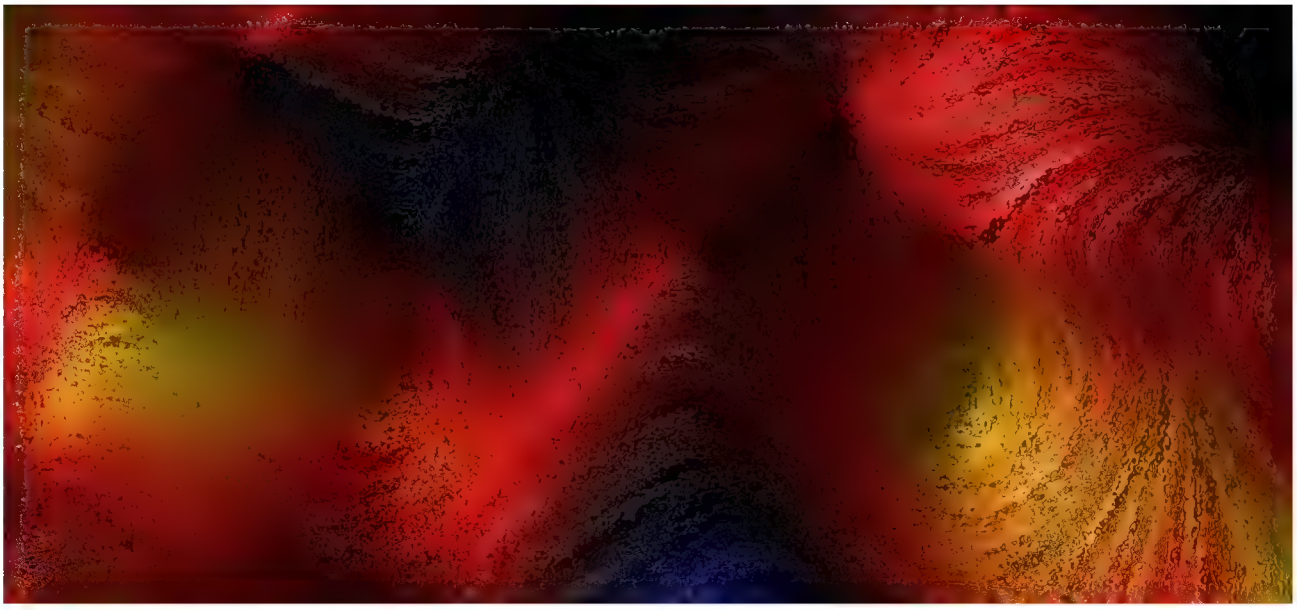
Range of motion increased;

Muscle spindles send reduced impulses to brain;

Decreasing strength of stretch reflex (habituation);

Questions

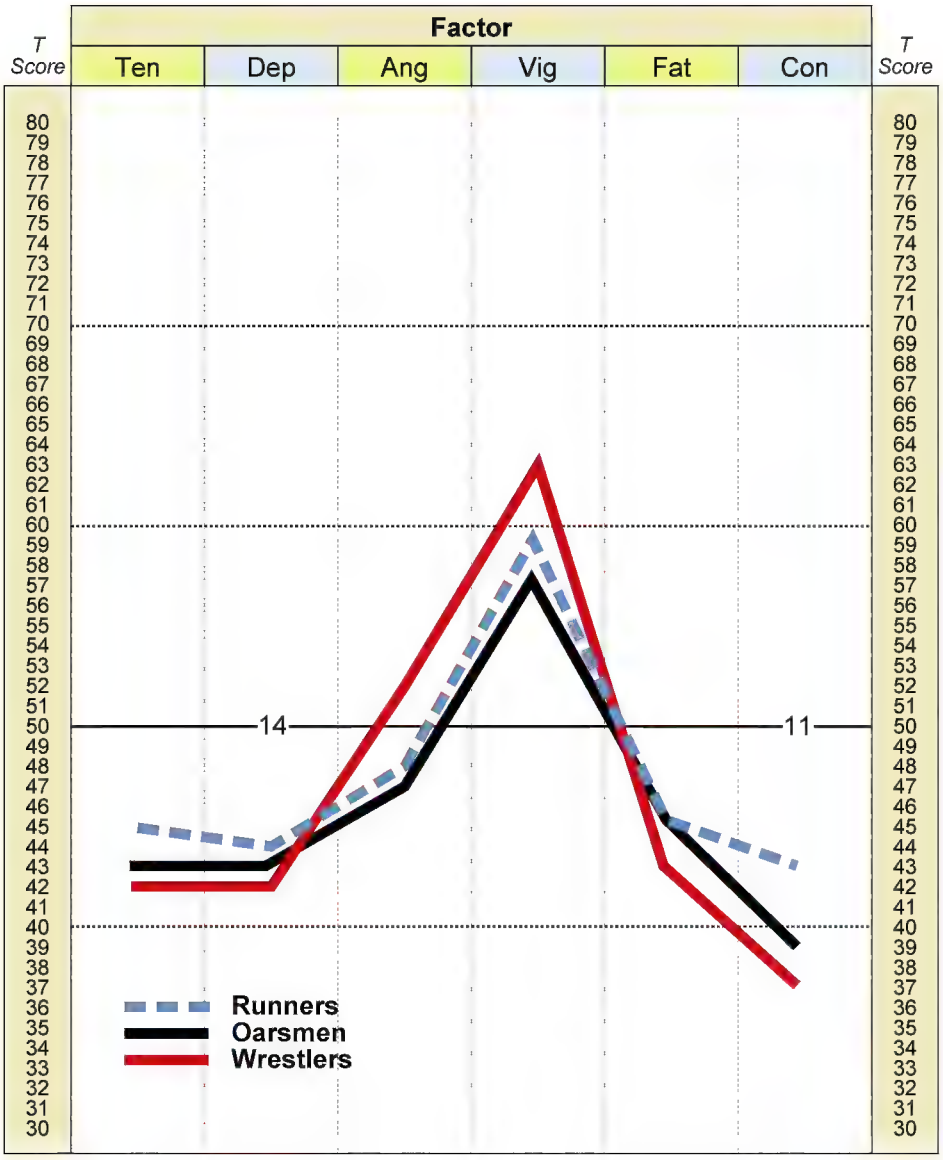
Part 6 Individual Differences



Part 6A Personality Theories and Testing

Question 22

The diagram shows Morgan's Profile of Mood States (POMS) summaries for elite wrestlers, distance runners, and rowers.



a What does POMS measure?

(2 marks)

b What does the profile of mood states for elite wrestlers suggest, and what problems are there with Morgan's research?

(6 marks)

Part 6B Achievement Motivation

Question 23

a Explain what is meant by achievement motivation

(2 marks)

b Achievement motivation is based on two qualities. Name these two qualities and explain them through a practical example.

(4 marks)

c What characteristics may be found in performers who show each of these two types of qualities?

(6 marks)

Part 6C Attitudes

Question 24

a 'Elite games players usually have a good attitude to their sport'. What do you understand by the term attitude and how could an athlete's attitude be measured?

(2 marks)

b Explain how a person's commitment to competitive sport may be affected by their attitudes, and suggest ways that a coach could help a performer improve their attitudes towards involvement with a team.

(4 marks)

Part 6D Aggression

Question 25

When watching sport being performing at an elite level you may occasionally see acts of aggression.

a

i What do you understand by the term aggression?

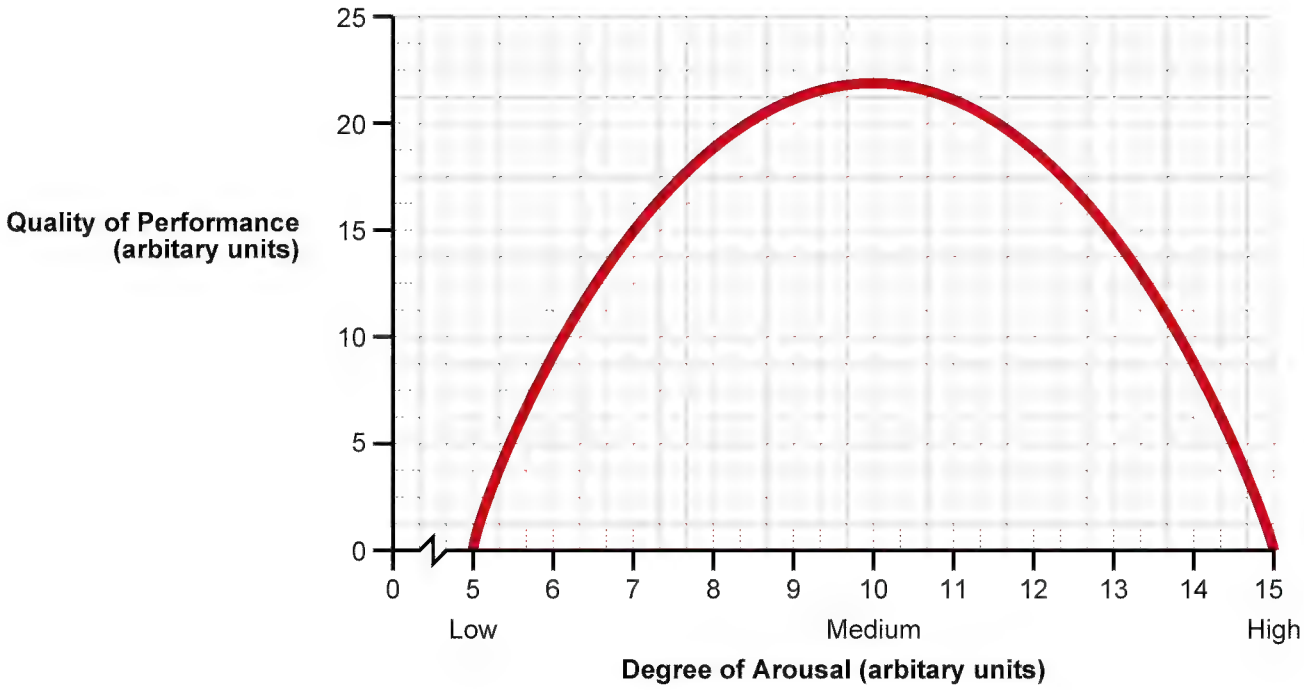
(3 marks)

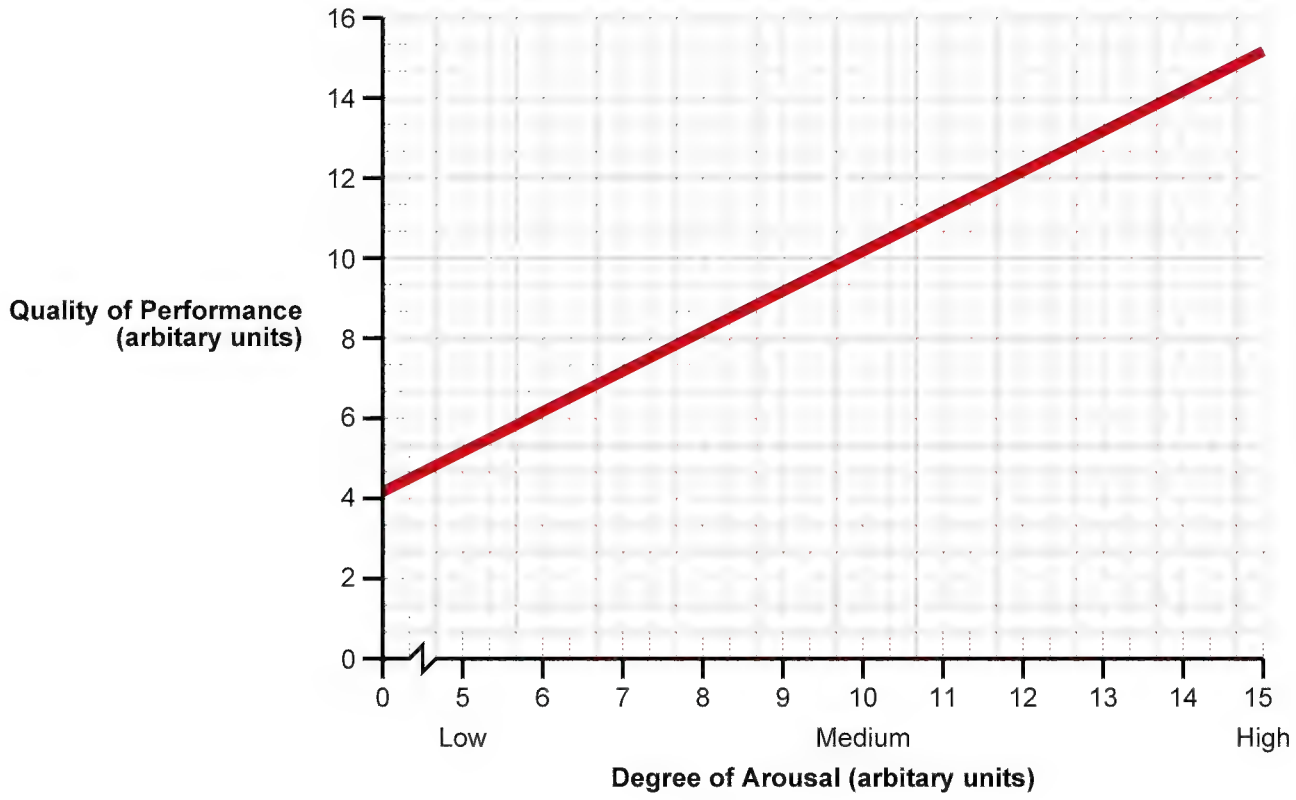
ii Explain why aggressive behaviour may occur in sport.

(5 marks)

Part 6E Arousal

Question 26 The diagrams show two hypothetical relationships between the level of arousal and quality of performance.





Question 26 *continued*

a With reference to the diagram, explain the relationship between arousal and skilled sport performance as proposed by each of these hypotheses.

(5 marks)

b

i Based on your answer to (a), sketch two hypothetical graphs to illustrate differences in the arousal-performance relationship for fine and gross motor skills.

(2 marks)

ii What are the implications of the graphs you have drawn for the pre-competition psychological preparation of the performers?

(4 marks)

Part 6F Self-Efficacy

Question 27

a Most elite performers have tremendous confidence in their own ability. Explain how such high levels of self-efficacy may enhance performance.

(4 marks)

b If a performer lacks confidence, how could a coach help improve their self-confidence?

(5 marks)

Part 6G Attribution Theory

Question 28

a Some elite performers will tend to blame things outside of their control when asked to explain the reasons why they failed to win. Use your knowledge of attribution theory to explain why this tends to be the case.

(4 marks)

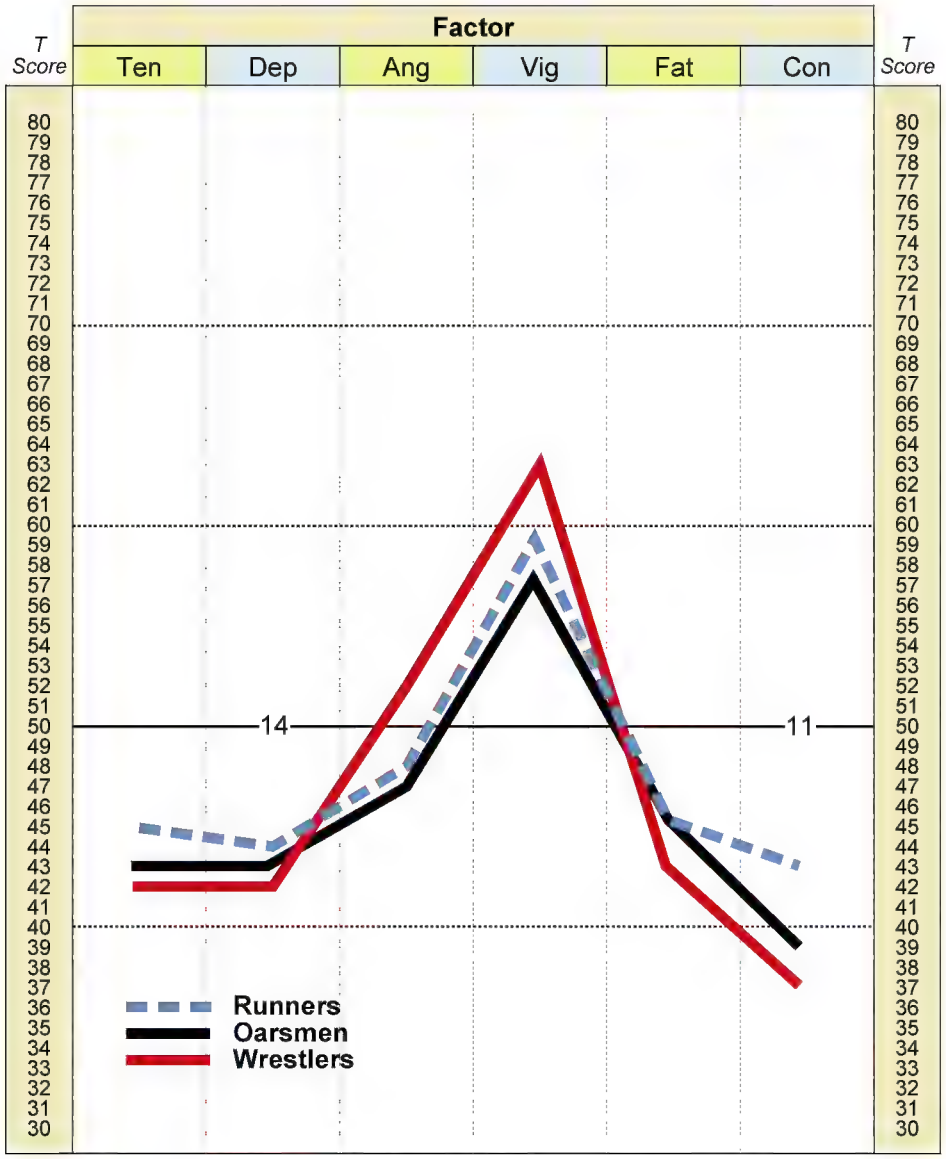
b Those who repeatedly fail at sport can at various times experience learned helplessness. What is learned helplessness and what role do attributions play in its development?

(5 marks)

Part 6A Personality Theories and Testing

Question 22

The diagram shows Morgan's Profile of Mood States (POMS) summaries for elite wrestlers, distance runners, and rowers.



a What does POMS measure?

(2 marks)

any 2 for 2 marks

POMS measures personality;

Mental health characteristics;

Attentional styles and emotional states;

Question 22 *continued*

b What does the profile of mood states for elite wrestlers suggest, and what problems are there with Morgan's research?

(6 marks)

Max of 6 marks

Possess more positive/good health characteristics than norm/less negative;

E.g. more vigour;

E.g. less tension/depression/anger/fatigue/confusion;

'Iceberg profile';

Based on questionnaire;

Tendency to produce errors/lies;

Not every successful athlete shows iceberg profile;

Could be that success produces positive mental health/mood profiles;

Part 6B Achievement Motivation

Question 23

a Explain what is meant by achievement motivation

(2 marks)

2 marks *Strive to achieve success;*

Enables persistence even when failure is encountered;

b Achievement motivation is based on two qualities. Name these two qualities and explain them through a practical example.

(4 marks)

4 marks *A need to achieve (Nach);*

Suitable example;

And a need to avoid failure (Naf);

Suitable example;

Question 23 *continued*

c What characteristics may be found in performers who show each of these two types of qualities?

(6 marks)

sub max 4 marks

Nach - seek out challenges;

Concerned with/demonstrate standards of performance;

Persist for longer;

Value feedback from others;

Enjoy evaluative situations;

Not afraid of failure;

Attribute performance to internal factors;

sub max 4 marks

Naf - concerned about possible failure;

Avoid challenging tasks;

Dislike situations where chance of success equals chance of failure;

Perform worse in evaluative situations;

Attribute performance to external factors;

Part 6C Attitudes

Question 24

a 'Elite games players usually have a good attitude to their sport'. What do you understand by the term attitude and how could an athlete's attitude be measured?

(2 marks)

2 marks

Subjective evaluation by individual of someone/something/some event;

Measured by questionnaire/interview/observation;

b Explain how a person's commitment to competitive sport may be affected by their attitudes, and suggest ways that a coach could help a performer improve their attitudes towards involvement with a team.

(4 marks)

any 4 for 4 marks

Positive attitude will tend to promote commitment/negative attitudes will tend to diminish commitment;

Emphasising/rewarding the success elements of involvement with team;

Goal-setting/setting targets/extrinsic motivation;

Assigning appropriate role/responsibility within team;

Change attitudes through use of cognitive dissonance;

Persuasive communication;

Part 6D Aggression

Question 25

When watching sport being performing at an elite level you may occasionally see acts of aggression.

a

i What do you understand by the term aggression?

(3 marks)

3 marks

Deliberate physical or verbal behaviour;

Intent to injure;

Outside rules/laws of sport/game;

ii Explain why aggressive behaviour may occur in sport.

(5 marks)

5 marks

In attempting to defend, opponents behaviour is 'frustrating';

Frustration-aggression hypothesis suggests that increases in frustration;

Will lead to aggression;

Social learning theory suggests aggression is learned;

Through observation/imitation;

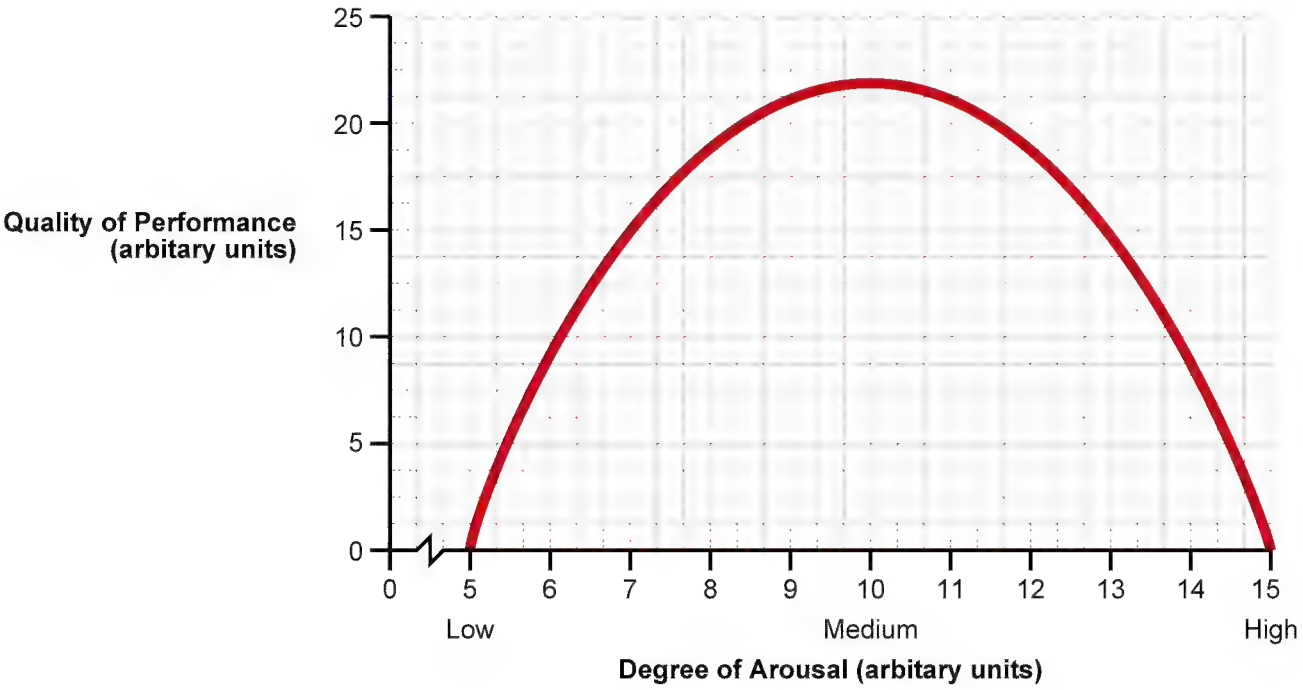
E.g. copying behaviour of others;

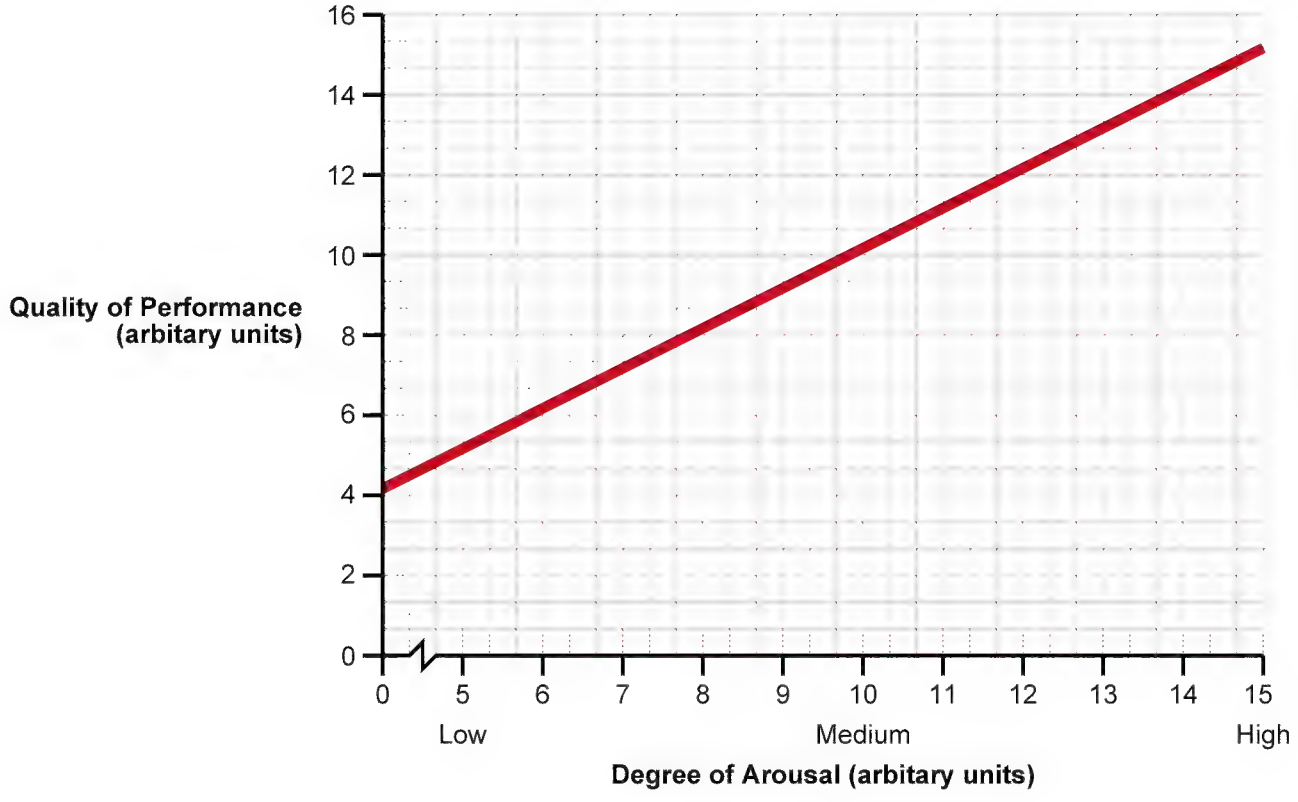
Through rewards;

E.g. getting away with it or praise from significant others;

Part 6E Arousal

Question 26 The diagrams show two hypothetical relationships between the level of arousal and quality of performance.





Question 26 *continued*

a With reference to the diagram, explain the relationship between arousal and skilled sport performance as proposed by each of these hypotheses.

(5 marks)

max 5 marks

sub max 3 marks for *Inverted-U theory;*

Idea that performance varies as arousal levels alter;

Optimal level of arousal for optimal performance;

Insufficient/too much arousal leads to performance;

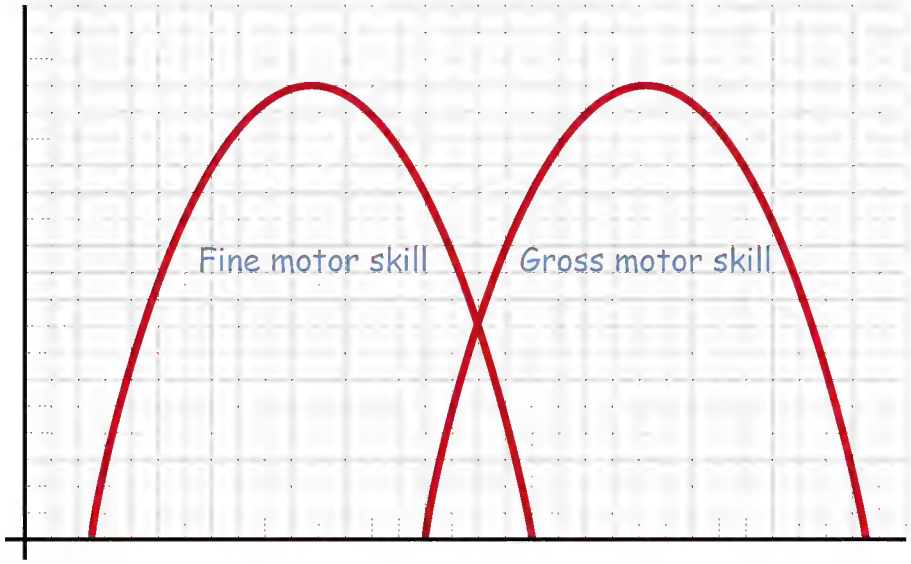
sub max 2 marks for *Drive theory;*

Linear increase in arousal to increase performance;

b

i Based on your answer to (a), sketch two hypothetical graphs to illustrate differences in the arousal-performance relationship for fine and gross motor skills.

(2 marks)



2 marks for *Two correctly drawn inverted U graphs;*

Clearly showing lower arousal for fine motor skills/higher arousal for gross motor skills;

Question 26 *continued*

ii What are the implications of the graphs you have drawn for the pre-competition psychological preparation of the performers?

(4 marks)

max of 4 marks

Need for performer to achieve optimal levels of arousal;

Varies according to (fine or gross) skill;

Competition increases arousal;

Hence need to control/reduce arousal;

Use stress reduction techniques;

Suitable example;

Part 6F Self-Efficacy

Question 27

a Most elite performers have tremendous confidence in their own ability. Explain how such high levels of self-efficacy may enhance performance.

(4 marks)

any 4 for 4 marks

Increases positive attitude;

Reduces fear of failure;

Enhances feeling of well-being;

Which leads to good performance;

Achievement of goal;

Which in turn further boosts self-confidence;

And maintains/improves performance;

b If a performer lacks confidence, how could a coach help improve their self-confidence?

(5 marks)

any 5 for 5 marks

Plan and work with individual/positive reinforcement;

Set appropriate goals;

Both short-term, and long-term;

In terms of fitness or skill or attitude;

Attribute failure to things within their control to permit changes;

Allow them to be successful/reduce level of competition;

Use verbal persuasion/vicarious experiences;

Mental rehearsal may be used;

Teach relaxation/stress management techniques;

Changes/improvements should be monitored by the coach;

And should be fed back to performer;

Mark Scheme

Part 6G Attribution Theory

Question 28

a Some elite performers will tend to blame things outside of their control when asked to explain the reasons why they failed to win. Use your knowledge of attribution theory to explain why this tends to be the case.

(4 marks)

any 4 for 4 marks

Tendency to attribute failure externally;

Because it makes us feel better about ourselves/motivates if defeat is beyond our control;

Also people tend to only be responsible for positive events rather than negative;

Known as self-serving bias;

Such external attributions tend to reduce intensity of emotional reactions/negative response;

But depends on importance of event;

More likely to continue with activity;

Question 28 *continued*

b Those who repeatedly fail at sport can at various times experience learned helplessness. What is learned helplessness and what role do attributions play in its development?

(5 marks)

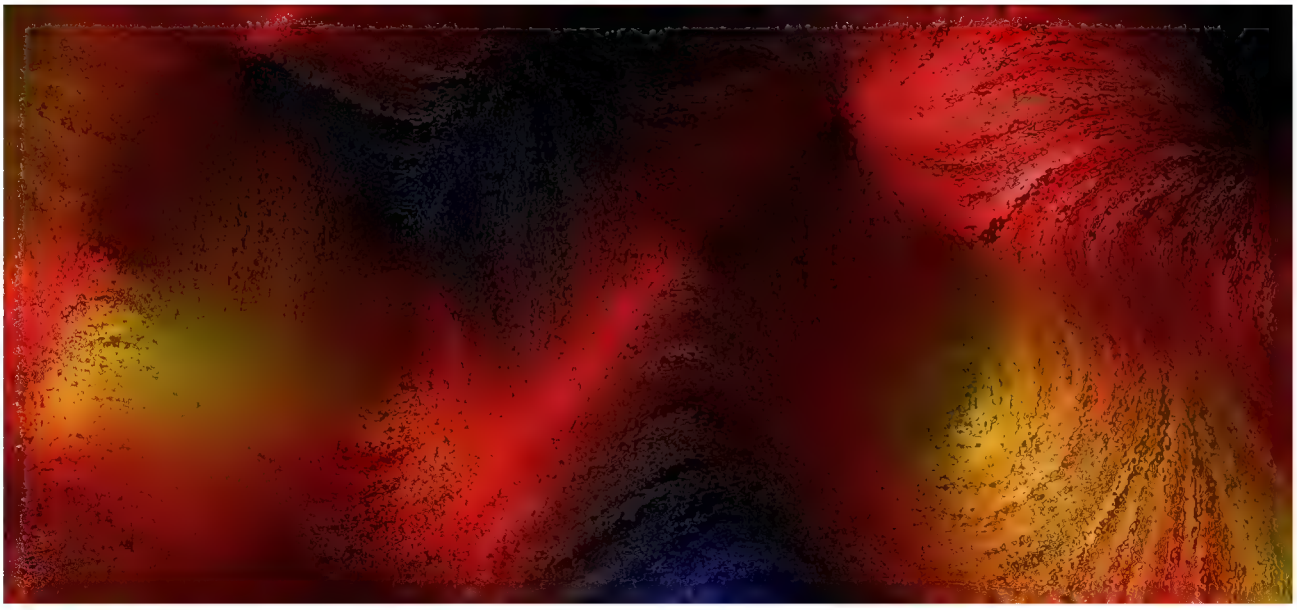
5 marks

sub max 2 marks *Learned helplessness is a strong reaction to failure; Leads to 'giving up' in face of repeated failure even if success is possible;*

sub max 4 marks *Attributions assist/lead to development of learned helplessness; Because it is thoughts concerning failure that affect subsequent efforts to change; Attributing failure to lack of ability is particularly damaging; Internal attributions reflect self-blame; Stable attributions are unchanging; Therefore failure remains predicted for the future;*

Questions

Part 7 Optimising Performance

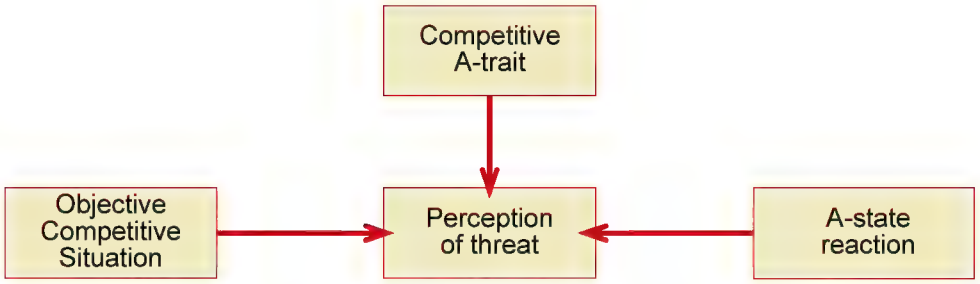


Part 7A Anxiety

Question 29

The nature of the event and its positioning within a stadium, often means that the shot putt competition for elite athletes may take place in front of many spectators.

Competing in the shot putt may cause anxiety in the performer. The diagram shows the relationship of competitive anxiety to the competition process.



a Using the diagram, explain why the competitive situation invariably leads to anxiety, and how and why these anxiety levels may vary between competitors.

(4 marks)

b Martens (1976) developed a Sport Competition Anxiety Test (SCAT). Outline the use of this test and its effectiveness.

(3 marks)

Question 30

Study the following quotation:

"Competition or any type of performance evaluation increases anxiety in nearly everyone." (Gill 1986).

a

i How is inverted U theory used to explain the effects of arousal on sports performance?

(2 marks)

ii What are the main effects of increasing anxiety?

(2 marks)

b Elite performers such as divers need to control their levels of anxiety in order to produce their optimum performance. Describe three methods of controlling anxiety.

(6 marks)

Part 7B Social Facilitation

Questions 31

a Some performers appear to perform well in front of an audience, while others may perform badly. This has been referred to as 'choking' under pressure. Explain this observation using social facilitation theory.

(6 marks)

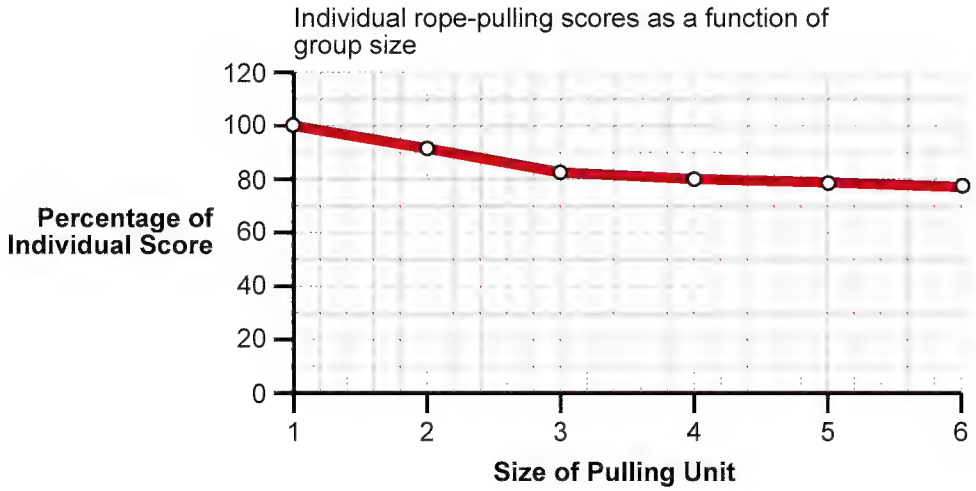
b How could a coach help a performer in the later stages of learning to overcome their failings in front of an audience?

(3 marks)

Part 7C Social Learning

Question 32

Ingham et al (1974) conducted an experiment to find how much force was being exerted by individuals in a rope-puling task involving two, three, four, five and six persons. The results of the experiment are shown in the figure below.



a Explain what the figure above shows.

(2 marks)

b

i Suggest two possible causes of the effects shown.

(2 marks)

ii What methods can a coach of a team sport employ to reduce these effects?

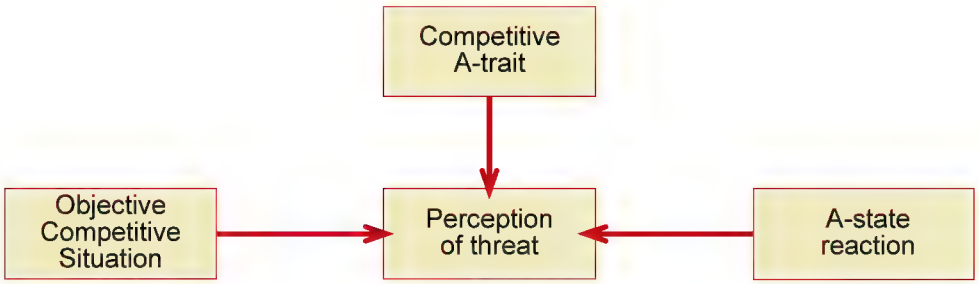
(3 marks)

Part 7A Anxiety

Question 29

The nature of the event and its positioning within a stadium, often means that the shot putt competition for elite athletes may take place in front of many spectators.

Competing in the shot putt may cause anxiety in the performer. The diagram shows the relationship of competitive anxiety to the competition process.



a Using the diagram, explain why the competitive situation invariably leads to anxiety, and how and why these anxiety levels may vary between competitors.

(4 marks)

any 4 for 4 marks

Threat of evaluation leads to feeling of anxiousness;

Individual differences between people in same situation;

Trait anxiety - personality trait to become anxious in certain situations;

State anxiety - changeable feelings at a given moment;

Situational factors - importance of situation/game creates different levels of anxiety in same person;

Fear of failure/performing badly;

Interaction with others (disagreements/aggressiveness)/injury/fatigue;

Question 29 *continued*

b Martens (1976) developed a Sport Competition Anxiety Test (SCAT). Outline the use of this test and its effectiveness.

(3 marks)

any 3 for 3 marks

Questionnaire given prior to competition;

Shown by research to be very reliable;

Measures trait anxiety;

In specific sport/competitive setting;

Also possibly not effective - respondents 'lie'/misinterpretation by non-experts/anxiety state alters;

Credit those who suggest CSAI(2) as alternative;

Mark Scheme

Question 30

Study the following quotation:

"Competition or any type of performance evaluation increases anxiety in nearly everyone." (Gill 1986).

a

i How is inverted U theory used to explain the effects of arousal on sports performance?

(2 marks)

2 marks *Inverted-U - idea that performance varies as arousal levels alter;*

Optimal level of arousal for optimal performance;

ii What are the main effects of increasing anxiety?

(2 marks)

2 marks *Cognitive - negative thoughts/loss of concentration/attentional narrowing/not feeling in control/worry;*

Somatic - muscle tension/sweaty palms/increased heart rate/increased breathing rate/increased blood pressure/decreased blood flow to skin/dry mouth;

Question 30 *continued*

b Elite performers such as divers need to control their levels of anxiety in order to produce their optimum performance. Describe three methods of controlling anxiety.

(6 marks)

any 2 for 2 marks

Mental rehearsal is a cognitive technique;

Uses visualisation to lock in on ' perfect performance';

As a means of focussing on 'control' of personal performance;

Reduces anxiety by diverting attention from (cause of) anxiety/blocking anxious thoughts;

Depends on previous learning of visualised sequences of perfect performance;

any 2 for 2 marks

Thought-stopping is a cognitive technique;

Use of simple mental or physical action (e.g. clenching fist, counting slowly);

As a means of switching attention into a calm/controlled mental state to reduce anxiety;

Depends on prior learning/conditioning of the response of the calm state to the stimulus of 'action';

Question 30 *continued*

any 2 for 2 marks

***Meditation** is a cognitive technique;*

Use of controlled breathing to induce a 'state' of mental calmness;

As a means of switching attention from anxiety-producing state to reduce anxiety;

Depends on prior learning to 'transcend' from anxious state to calm state through 'mantra'/word/sound;

any 2 for 2 marks

***Progressive Muscular Relaxation** is a somatic technique;*

Use of alternate tension and relaxation of body muscles coupled with breathing rhythm;

Progressively reduces tension of whole body and associated anxiety;

Depends on learned ability to systematically concentrate on tension reduction in muscles, starting at periphery and working towards centre;

Question 30 *continued*

any 2 for 2 marks

Autogenic training *is a somatic technique;*

Same as PMR, but includes imagery of a warm, relaxing environment to help relaxation process;

Use of alternate tension and relaxation of body muscles coupled with breathing rhythm;

Progressively reduces tension of whole body and associated anxiety;

Depends on learned ability to systematically concentrate on tension reduction in muscles, starting at periphery and working towards centre;

any 2 for 2 marks

Biofeedback *is a somatic technique;*

Use of measuring device (pulseometer) to reduce level of chosen variable;

This therefore reduces anxiety associated with physiological variable;

Depends on prior learning of ability to use monitoring device as a means of diverting attention away from anxiety;

Question 30 *continued*

any 2 for 2 marks

Stress inoculation *combines somatic and cognitive;*

Learn somatic technique e.g.PMR;

List and rank sources of anxiety;

Practice somatic technique whilst visualising scenes associated with anxiety factors in reverse order of seriousness;

Depends on ability to learn and practice techniques;

Part 7B Social Facilitation

Questions 31

a Some performers appear to perform well in front of an audience, while others may perform badly. This has been referred to as 'choking' under pressure. Explain this observation using social facilitation theory.

(6 marks)

any 6 for 6 marks

Presence of audience increases arousal, this tends to make performer try harder;

Beginner/novice/early stages of learning - performance negatively affected by increase in arousal;

Because performer has not fully developed appropriate responses to demands of performance;

Negative effects made more so by attempting complex task;

Evaluation apprehension/extra arousal if audience is seen as evaluative;

Reference to inverted U hypothesis and idea of over-arousal and decreased performance;

Later stages of learning/expert - arousal tends to enhance performance, especially with simple task;

Performer has developed skilled responses to a high level;

Question 31 *continued*

b How could a coach help a performer in the later stages of learning overcome their failings in front of an audience?

(3 marks)

any 3 for 3 marks

Encourage demonstration of skills in front of audience during practice;

If necessary begin with small audience and gradually increase complexity/demand of audience;

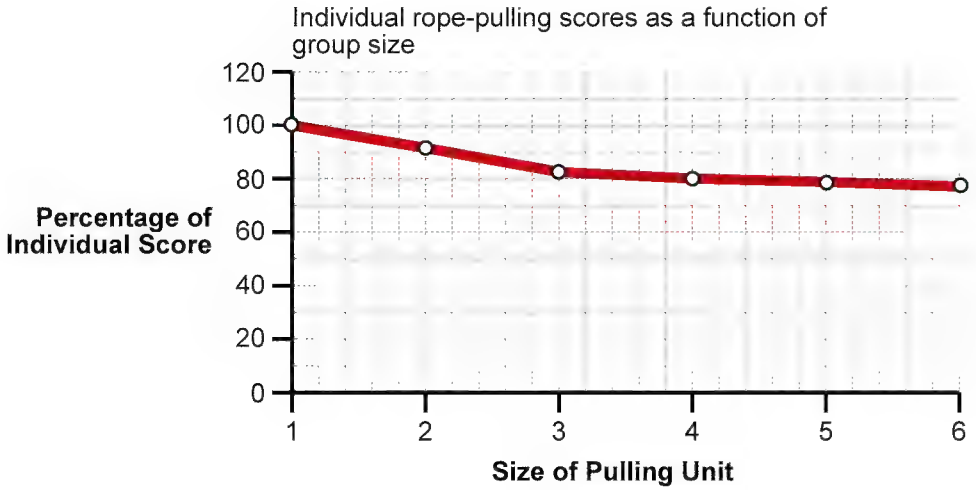
Maintain audience presence as complexity of learned skills develop;

Provide positive reinforcement/praise/feedback during/following performance;

Part 7C Social Learning

Question 32

Ingham et al (1974) conducted an experiment to find how much force was being exerted by individuals in a rope-puling task involving two, three, four, five and six persons. The results of the experiment are shown in the figure below.



a Explain what figure above shows.

(2 marks)

2 marks *Decrease in individual performance with increase in group size;*

Ringlemann effect/social loafing;

b

i Suggest two possible causes of the effects shown.

(2 marks)

2 marks *Motivational effects/individual hidden in group/feeling unwanted/need to avoid failure;*

Co-ordination effects/lack of clarity in role/lack of interaction/isolated/cliques/poor cohesion;

Question 32 *continued*

ii What methods can a coach of a team sport employ to reduce these effects?

(3 marks)

any 3 for 3 marks

Identify and promote individual contributions to team performance/set goals/targets/rewards;

Team encouragement/teambuilding/notice assists;

Select individuals with interactive skills;

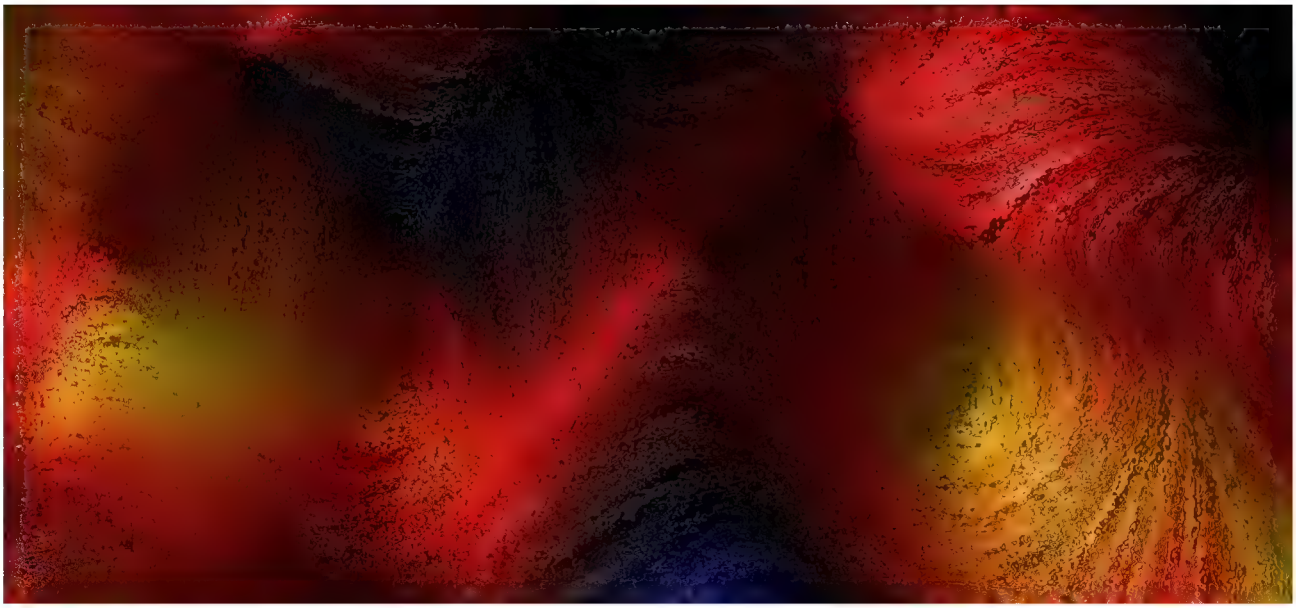
Develop interactive skills/small team games/develop units through games;

Clearly defined roles;

Appropriate levels of fitness;

Questions

Part 8 Groups



Part 8A Group Dynamics

Question 33

a Explain what you understand by the term group cohesion.

(4 marks)

b Identify two methods of measuring the cohesiveness of a sports team.

(2 marks)

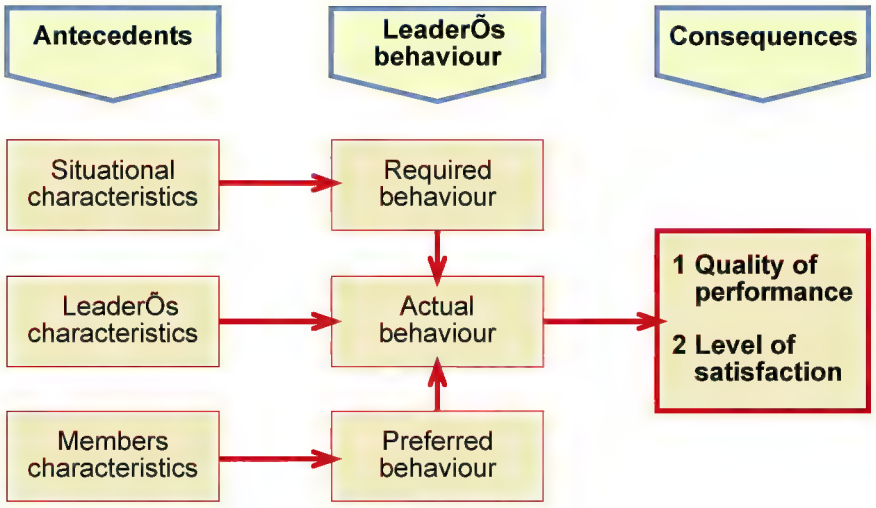
c Are cohesive groups in sport always more successful? Justify your answer.

(4 marks)

Part 8B Leadership

Question 34

In order for invasion teams to function successfully, they need a good leader. The diagram shows Chelladurai's multidimensional model of leadership.



Briefly explain the model and use it to discuss the idea that leaders need to be adaptable in their approach.

(5 marks)

Part 8A Group Dynamics

Question 33

a Explain what you understand by the term group cohesion.

(4 marks)

4 marks

Influences that keep a team together;

Internal and dynamic;

Task cohesion - common goals;

Social cohesion - relationships;

b Identify two methods of measuring the cohesiveness of a sports team.

(2 marks)

2 marks

Questionnaires;

Sociograms;

c Are cohesive groups in sport always more successful? Justify your answer.

(4 marks)

max of 4 marks

Not always;

Cohesive groups tend to stick together and work to common goals;

Cohesion more important in team games;

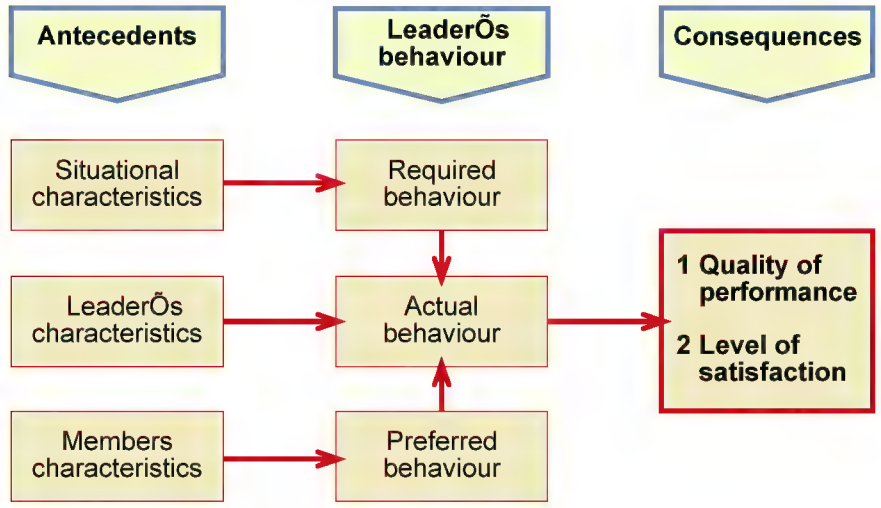
High commitment to task could still produce good performances if social cohesion not strong;

Strong social cohesion may distract from task;

Part 8A Leadership

Question 34

In order for invasion teams to function successfully, they need a good leader. The diagram shows Chelladurai's multidimensional model of leadership.



Briefly explain the model and use it to discuss the idea that leaders need to be adaptable in their approach.

(5 marks)

any 5 for 5 marks

Leadership is an interactional process;

Performer's satisfaction and performance/outcomes of performance and situation depend on interaction of three aspects of leaders behaviour;

Effective leadership is dependent on both situational and group factors;

Required behaviour is the expectations that the management has of the leader;

Actual behaviour is way leader normally goes about role;

Preferred behaviour is the way the athletes like their leader to relate to them;

Question 34 *continued*

Ideal team situation is when all three behaviours are congruent – leader acts in a way that both management and athletes like;

What leader does should be appropriate to situation and matches groups preferences;

Hence leader needs to adapt to demands of both the situation and the preferences of the group to achieve desired outcomes;

Questions

World Games are now a regular highlight in the sports world for both performers and spectators.

a Name, with examples, two different forms of World Games.

(4 marks)

b Professional managers rather than keen amateur volunteers now organise and manage many international sport events. Why is this the case?

(5 marks)

c World games events attract a huge number of spectators and broadcast audience. Why?

(6 marks)

Question 2 The organisation and characteristics of World Games have changed considerably over the last 30 years.

a Describe some of the major differences and that might be seen when comparing an Olympic Games of the 1970's with a modern day event such as the Sydney Olympics.

(4 marks)

b The need to finance the organisation and infrastructure of a world championship has meant a greater reliance on contracts with sponsors and franchise holders.

What are sponsors and franchise holders and what effect might they have on these events?

(7 marks)

c Regional qualifying competitions for events such as World Cups result in some weaker teams appearing in the finals. Why have these regional qualifying rounds?

(4 marks)

Mark Scheme

World Games are now a regular highlight in the sports world for both performers and spectators.

a Name, with examples, two different forms of World Games.

(4 marks)

4 marks for 4 of:
max 2 per section

Name	Example
Regional, single event championships;	*European Cup, Asian Championships etc*
World wide single event championships	*Football World Cup etc*
World wide multi event championships	*Olympics,*
Specific group championships	*Paralympics*
Aboriginal Peoples Games	

continued

b Professional managers rather than keen amateur volunteers now organise and manage many international sport events. Why is this the case?

(5 marks)

5 marks for 5 of:

Greater number of participants involved;

With increase in organisational/infrastructure demands;

Professional nature of performers raises expectations of quality of organisation/event management;

Large/larger sums of money involved;

Higher expectations of events from host countries/spectators/viewers;

High level of expectation from commercial interests;

Country/government expectations due to 'shop window' expectation;

These factors make it less likely that amateur administrators have the time/expertise to manage these events;

But still role for volunteers to help with the running of these events;

continued

c World games events attract a huge number of spectators and broadcast audience. Why?

(6 marks)

6 marks for 6 of:

Spectator numbers are reflection of strong sport/games culture in many countries;

Vicarious experiences of winning/.triumph/struggle or eq;

Sublimation of international rivalries to the sports field;

Seeing our international performers as our 'champions'/gladiators;

Gives opportunities for feelings/demonstration of national pride;

Appreciation of skill/talent/determination (or eq) of performers;

Sport performers often icons for society and spectators come to praise/pay homage etc;

Spectators seek shared experiences/promotion of sense of community/ reduction in internal rivalries;

Greater promotion of sport events by organisers/media;

Better technology/satellite coverage etc allows for more viewer opportunities;

Increased wealth/cheaper travel allows more to travel to world events/sports tourism;

Mark Scheme

The organisation and characteristics of World Games have changed considerably over the last 30 years.

a Describe some of the major differences and that might be seen when comparing an Olympic Games of the 1970's with a modern day event such as the Sydney Olympics.

(4 marks)

4 marks for 4 of:

Greater number of events/competitors;

Increased media coverage;

Professional performers allowed to compete;

Expectation that the event will achieve a financial surplus;

Expectation that the event will be financially 'insured' by national government;

Increased competition during the bidding process by prospective host cities;

Increased commercialisation;

Greater number of sponsors/franchise holders/ larger media contracts;

continued

b The need to finance the organisation and infrastructure of a world championship has meant a greater reliance on contracts with sponsors and franchise holders.

What are sponsors and franchise holders and what effect might they have on these events?

(7 marks)

2 marks for 2 of:

Sponsor - an organisation that pays money to have their name associated/linked/carried by sport performers or events;

Franchise holder - an organisation that purchases the right to be the sole provider of a service/commodity/equipment at these events;

5 marks for 5 of:

Effects on Events -

Some may consider that the level of commercialisation to be too high;

May go against the nature of sport/amateur-elite ethic etc;

Concern expressed that elite sport has become a part of the entertainment industry;

Fears that the need to entertain may affect nature of the competition;

Sponsors pay to have their goods/organisation in the media spotlight;

Therefore demand high media coverage of the event;

Puts pressure on organisers to accommodate the needs of the media;

By changing organisational conditions/timings etc within

continued

the event;

May be detrimental to performers or spectators;

Sponsors may wish to use elite performers in a PR role during the event;

This may be detrimental to the performer;

Spectators/participants may not wish to use the franchise holder's products/services;

Wish to exercise choice/own preferences;

Franchising company may acquire bad image - reflecting badly upon the event/sport/organisers;

continued

c Regional qualifying competitions for events such as World Cups result in some weaker teams appearing in the finals. Why have these regional qualifying rounds?

(4 marks)

4 marks for 4 of:

Creates localised/regional/continental interest in the sport/competition;

Reduces travelling in the earlier rounds;

Many world governing bodies consider they have a responsibility to spread participation to all parts of the world;

Regional qualifying competitions ensure a world wide representation;

Resulting in increased levels of participation;

Not to have regionalised competitions would result in a constant maintenance of the status quo;

Playing against stronger teams allows weaker teams/nations chance to improve;

Also gives opportunities for different styles/tactics/ etc to seen.

The Olympic Games are the largest sporting event in the world. As well as being an occasion for elite performers to compete it also contributes a great deal to our concepts of sporting ethics.

a What do you understand by the term Olympism?

(3 marks)

b Competition amongst bidding cities to be awarded an Olympic Games may be intense.

i Why are cities keen to stage an Olympic Games?

(4 marks)

ii What problems has the desire to win the right to stage an Olympic Games brought to the Olympic Movement?

(4 marks)

iii The size of a modern day Olympic Games is a concern and it has been suggested that the number of events or competitors should be reduced.

List outline arguments for and against this proposal in relation to the ideals of the Olympic Charter which wishes to involve all peoples or nations in the world?

(4 marks)

Mark Scheme

The Olympic Games are the largest sporting event in the world. As well as being an occasion for elite performers to compete it also contributes a great deal to our concepts of sporting ethics.

a What do you understand by the term Olympism?

(3 marks)

3 marks for 3 of:

To compete fairly/without cheating/to keep to the written rules/rules;

To compete with a sense of respect for opponents/to accept a philosophy of fair play

To compete for the love of sport/personal enjoyment/fulfilment/intrinsic reasons;

To value participation more than winning;

To value the struggle/striving more than the outcome;

To only use one's own talents/natural abilities/one's own efforts;

That nations should come together improved /tolerance of other countries

continued

b Competition amongst bidding cities to be awarded an Olympic Games may be intense.

i Why are cities keen to stage an Olympic Games?

(4 marks)

4 marks for 4 of:

Promotes the city on a world stage;

Increases revenue though future tourism;

Businesses/companies may relocate to the city;

Income to the city from the spectators/participants visiting the Games;

Improvements/regeneration in infrastructure;

Improvements/regeneration in facilities for local residents after the games;

Feel good factor;

Revenue from central government to help provide facilities/infrastructure;

continued

ii What problems has the desire to win the right to stage an Olympic Games brought to the Olympic Movement?

(4 marks)

4 marks for 4 of:

Attempts by cities/organising committees to bribe members of the IOC to give them their vote;

Cities put on lavish presentations/visits etc to persuade IOC members to vote for them;

Cities need to commercialise the Games to help fund the organisation of the event;

Commercialisation may have detrimental effects on participants and spectators;

The use of resources to stage the Games rather than provide more important services/facilities for local residents;

Cost of staging/bidding for an Olympic Games precludes poorer cities/countries from bidding;

Prevents the world-wide spread of Olympic movement or eq;

continued

iii The size of a modern day Olympic Games is a concern and it has been suggested that the number of events or competitors should be reduced.

List outline arguements for and against this proposal in relation to the ideals of the Olympic Charter which wishes to involve all peoples or nations in the world?

(4 marks)

4 marks for 4 of:

For	Against
A very large event will preclude poorer nations;	*But it allows for more participants to be involved*
Because of the costs of staging;	
Size may be reduced having less events/sports;	*Wider variety of sports played world wide/how do you decide?*
Or less competitors in non-team events;	*Offers less encouragement for smaller/developing nations;*
Spread the Games amongst several cities;	*Requires change in Olympic Charter;*
Spread games across small nations located together;	*As above*

Elite performers, due to their role model status, are expected to be both successful and upholders of our culture's sport ethics.

a What do you understand by the terms sportsmanship and gamesmanship?

(4 marks)

b Can an elite performer conform to the 'contract to compete' and yet still become a world champion?

(6 marks)

c An elite performer experiences different pressures than those felt by an average club player.

Give examples of such pressures.

(3 marks)

d Recent violent acts by players on the field of play have been prosecuted by the police. Is this an appropriate way of dealing with this problem? List outline arguments for and against.

(4 marks)

Elite performers, due to their role model status, are expected to be both successful and upholders of our culture's sport ethics.

a What do you understand by the terms sportsmanship and gamesmanship?

(4 marks)

2 marks for 2 of: **Sportsmanship**

accept appropriate examples if they fall within meanings given below

Plays fairly:

Shows respect for opponent/wins with modesty/loses gracefully;

Keeps to the rules;

Plays within the spirit of the game;

2 marks for 2 of: **Gamesmanship**

accept appropriate examples if they fall within meanings given below

Seeking to gain an advantage outside of play;

Without breaking the letter of the rules/laws;

But may transgress the spirit of the game;

Dependent upon an individual's interpretation of what is right or wrong

continued

b Can an elite performer conform to the 'contract to compete' and yet still become a world champion?

(6 marks)

6 marks for: *1 mark for identifying and discussing each of the elements, 2 possible extra marks for more extended discussion in any 2 areas*

1 mark for: ***Strive to win***

Yes all performers normally strive to win

but sometimes this does not occur if by losing some,

advantage can accrue in a tournament setting;

1 mark for: ***Within the rules/ethics of the contest)***

Yes an elite performer can choose to stay within the rules/etiquette of the situation;

But some may take the risk of cheating through use of drugs/breaking match rules etc;

1 mark for: ***Allowing fair/free opportunity to win/achieve***

Yes but more difficult as performer needs to make personal decision;

As to whether the means they may use to prevent an opponent from beating them are reasonable/ethical;

High temptation to cross this unclear boundary;

1 mark for: ***Within the characteristics of the activity***

Performers need to know the boundaries within their activity/level \of activity;

This comes through experience;

continued

c An elite performer experiences different pressures than those felt by an average club player.

Give examples of such pressures.

(3 marks)

4 marks for 4 of:

May be a professional and income is dependent upon winning;

Elite performers set themselves high/demanding/goals

Pressure from media/public as their representative;

Interest from public/media leads to intrusion to private life;

Pressure of being role model in performance/in public for sponsors/club etc;

In team situation other may be dependent upon elite performer's level of performance/team mates/coaches etc

continued

d Recent violent acts by players on the field of play have been prosecuted by the police. Is this an appropriate way of dealing with this problem? List outline arguments for and against.

(4 marks)

Max 3 per section

Yes

Players are still subject to the law of the land on the pitch;

Such violent acts could incite crowd trouble;

Players are frequently high profile role models;

Clubs and national governing bodies may have a vested interest in dealing lightly with the offender;

No

Hard to distinguish between intention and accident;

Some 'assault' is allowable by the rules of the game;

The referee is the judge of what falls outside the laws of the game;

In our culture we believe that sport may have a benefit for the whole of society.

a Describe two ways in which an action in sport may have a beneficial effect on society.

(4 marks)

b It is an acknowledged fact that some performers will use performance enhancing drugs (PEDs).

i Give two examples of PEDs and the reason why a performer might take them.

(4 marks)

ii Given the difficulties in testing accurately for the use of PEDs why not just allow performers to use them? You should answer this question only from the perspective of the performer

(3 marks)

iii Why should allowing the free use of PEDs have a dysfunctional effect upon society?

(4 marks)

Mark Scheme

In our culture we believe that sport may have a benefit for the whole of society.

a Describe two ways in which an action in sport may have a beneficial effect on society.

(4 marks)

4 marks: 1 mark for the action, 1 mark for the associated benefit to a maximum of 4:
Students may use other valid responses – markers should use their judgement based on the following examples

Action	**Benefit**
Congratulating an opponent on their win	*Demonstrates respect for others/ability to put a conflict behind oneself/an ability to placed an action in a context;*
Not arguing with an official even when they are clearly wrong;	*An ability to accept rules/authority of another;*
Giving your opponents a player if they are one short	*People can compete with each other but in a fair and equal manner/the quality of the experience is more important than the outcome/*
Walking in cricket before given out	*Honesty/doing what you know is right;*

continued

b It is an acknowledged fact that some performers will use performance enhancing drugs (PEDs).

i Give two examples of PEDs and the reason why a performer might take them.

(4 marks)

4 marks: 2 marks for the examples, 2 marks for a correct explanation of use;

Drug	**Effect**
Steroids;	*Builds muscle bulk quickly/improves recovery from training/performance;*
Stimulants;	*Increase feeling of mental sharpness, reduce tiredness;.*
Erythropoietin/EPO;	*Enhances stamina/increases number red blood cells/improves oxygen carrying ability of blood;*
Insulin;	*Improves strength and power.*
Human Growth Hormone (HGH)	*Builds lean muscle and reduces fat.*
Insulin Growth Factor-1 (IGF-1):	*Produces bigger/stronger muscles/high muscle definition.*
Beta blockers	*Reduces heart rate/reduces tension or eq;*
Oxyglobin	*Helps the body obtain and use more oxygen from the blood/helps competitors resist fatigue in endurance events*

continued

ii Given the difficulties in testing accurately for the use of PEDs why not just allow performers to use them? You should answer this question only from the perspective of the performer

(4 marks)

4 marks for 4 of:

Some PEDs have poor health side effects;

This would give an advantage to better off performers;

Would pressure all athletes n to taking PEDs;

Despite their moral/ethical objections;

Would prefer to win as a result of their effort;

Many athletes will object to putting non-natural substances into their bodies

iii Why should allowing the free use of PEDs have a dysfunctional effect upon society?

(3 marks)

3 marks for 3 of:

Removes the image of sport as being about human endeavour;

Sets a bad example for young people;

Demonstrates that winning at any cost is acceptable;

Devalues the concept of achieving as a result of effort;

Gives in because of the difficulties of enforcing the ban;

Would go against what the majority is society believe to correct;

Would cause international difficulties/tensions/arguments

Elite football matches can sometimes be accompanied by violent behaviour by hooligans.

The police and the football authorities have undertaken a series of measures to reduce or eliminate hooligan behaviour.

a Describe three types of behaviour that might be described as 'hooligan behaviour'

(3 marks)

b What measures have been taken to control or eliminate such behaviour.

(5 marks)

c Efforts have been made to control these hooligan activities because it is considered to have a detrimental effect upon society in general.

What are these detrimental effects on society?

(7 marks)

Mark Scheme

Elite football matches can sometimes be accompanied by violent behaviour by hooligans.

The police and the football authorities have undertaken a series of measures to reduce or eliminate hooligan behaviour.

a Describe three types of behaviour that might be described as 'hooligan behaviour'

(3 marks)

3 marks for 3 of:

Using obscene/racist chants against opposition fans or players

Spitting at opposition players/team;

Throwing objects to at opposition players/spectators;

Invading the pitch;

Taunting opposition fans in the street before/after the game/desecration of local/regional/national symbols;

Attacking other fans outside the stadium;

General acts of vandalism;

Pre-organised violent confrontations with opposition hooligans;

continued

b What measures have been taken to control or eliminate such behaviour.

(5 marks)

5 marks for 5of:

Alcohol bans in grounds;

Segregation of fans;

All-seater stadia;

CCTV to identify hooligans/banned persons;

Use of centralised intelligence by police/football authorities;

Travel bans/restriction orders;

Use of ID cards;

Encouraging more family attendance;

Localised/national campaigns;

Increased policing/improved stewarding;

Varying kick-off times;

Banning away fans;

Closing alcohol outlets in city centres/near grounds;

continued

c Efforts have been made to control these hooligan activities because it is considered to have a detrimental effect upon society in general.

What are these detrimental effects on society?

(7 marks)

7 marks for 7 of:

Increased surveillance/CCTV/ID cards – loss of privacy;

Segregation – loss of friendly rivalry;

Damage to national reputation;

Cost of policing;

Detrimental effect on the image of young males;

Feelings of a more violent society – image;

Image of young males – stereotype;

Reputation of the game – loss of value of sport;

Alcohol ban – loss of sociability;

Increased policing/control of non-hooligans;

Police taken away from other crime reduction/prevention work;

Less free society;

Law abiding fans treated similarly/damned by association;

a To achieve elite performer status an individual must have certain characteristics and opportunities – what are they?

(6 marks)

b Trace the stages that a young performer currently playing for their school or local club who goes on to represent their country.

(3 marks)

c Identify any external agency of factor that may help them achieve each stage that you have identified in part (b).

(6 marks)

a To achieve elite performer status an individual must have certain characteristics and opportunities – what are they?

(6 marks)

6 marks for 6 of:

Have the necessary level of ability/skill/fitness/talent etc;

Have the determination/motivation/drive to develop themselves;

High need to achieve;

Be prepared to commit time;

To sacrifice other areas of their life to achieve their elite objective;

To have access to specialist facilities;

Access to high quality coaching;

Medical/technical/ support;

External financial support;

Structured competitive/ selection system;

continued

b Trace the stages that a young performer currently playing for their school or local club who goes on to represent their country.

(3 marks)

3 marks for 3 of:

A Local club/school TO District/town/city/Talent Development Programme

B TO Regional/County team or development squad

C TO International squad or elite development squad/residential centre

continued

c Identify any external agency of factor that may help them achieve each stage that you have identified in part (b).

(6 marks)

Stage A

Trials;

Club school coach input;

Financial support from parents/club;

Stage B

NGB Talent Identification Programme (could also be used in A);

Specialist coaching;

Good standard training facilities;

Opportunity to play with others of similar ability;

In a structured competitive system;

External funding/SportAid/Sport England;

Stage C

Medical/nutritional support;

Technical/technological aids to training;

Sponsorship;

Availability of rewards;

Developing elite performance requires the coordinated support of a wide range of agencies and services.

a What role does the English Institute of Sport play in helping to develop an elite performer?

(4 marks)

b Other than by providing funding support how else can a National Governing Body help support the development of elite performers within their sport?

(5 marks)

c Discuss to what extent in the UK a National governing body is independent of government control.

(6 marks)

A wide range of agencies support the development of elite performers.

a What is the role of SportAid and how does it carry out this role?

(5 marks)

b Coaches play a vital role in developing an elite performer.

i Sports Coach UK's main objective is to "Produce the world's best pool of international coaches". State four ways in which it attempts to do this.

(4 marks)

ii What are the advantages and disadvantages in using a professional rather than an amateur coach?

(6 marks)

Developing elite performance requires the coordinated support of a wide range of agencies and services.

a What role does the English Institute of Sport play in helping to develop an elite performer?

(4 marks)

4 marks for 4 of:

Provides sport specific coaching/support;

And general medical/technical/scientific support;

Through nine regional centres;

Also supports NGB in terms of funding World Class programme;

Through Performance/Potential/Start funding;

Dependent upon how close to medal winning the performer is;

Helps performers with training costs;

Through Athlete Personal Awards;

Provides the Athlete Career Education programme;

continued

b Other than by providing funding support how else can a National Governing Body help support the development of elite performers within their sport?

(5 marks)

5 marks for 5 of:

Have a grass roots participation development programme;

To encourage young performers into the sport;

Have in place talent identification programmes;

And talent development programmes;

Coach education programmes;

Tiered levels of competition;

They will also require a Performance Plan;

Indicating medal/success targets in major competitions;

Within a specified time frame;

To receive support from Lottery/Exchequer funding;

continued

c Discuss to what extent in the UK a National Governing Body is independent of government control.

(6 marks)

max 4 per section:

Independent

A sport national governing body is set up for the benefit of those that play the sport;

It must comply with the law of the land;

And if it affiliates to other bodies/IOC/International governing body/ it must comply with their rules and regulations;

But other than that they are independent bodies free from government control;

Dependent

Most NGBs need funds to enable them to fulfil their objectives;

Although they have some funding through membership fees/sponsorship etc;

They will also need to access government funding;

Which is distributed by Sport England;

Sport England's policies and objectives are laid down by the government;

And therefore NGBs have to meet Sport England's criteria before any;

Exchequer or Lottery funding is made available;

Therefore a degree of indirect control is exerted by the government through Sport England;

Mark Scheme

A wide range of agencies support the development of elite performers.

a What is the role of SportAid and how does it carry out this role?

(5 marks)

max 3 per section;

Role

to help develop young talented performers;

or disabled performers of any age;

who are not already in receipt of funding from NGB/Sport England;

who have the potential to reach elite level;

How

by providing funding for training expenses/equipment etc;

raising money as a charity;

through celebrity lunches/business seminars;

attended/hosted by sports stars;

many of whom were formerly supported by SportAid;

continued

b Coaches play a vital role in developing an elite performer.

i Sports Coach UK's main objective is to "Produce the world's best pool of international coaches". State four ways in which it attempts to do this.

(4 marks)

4 marks for 4 of:

range of courses for beginner coaches to international level;

with a range of graded qualifications;

generic courses/nutrition/psychology/motivation or eq;

works with NGB's to devise sport specific coaching courses;

provision of information services;

printed publications/booklets/tapes etc;

coaching database available on the Internet;

provides information on areas such as child protection;

continued

ii What are the advantages and disadvantages in using a professional rather than an amateur coach?

(6 marks)

The professional coach is full time;

And can therefore devote greater attention to the performer;

Although they have more than one to look after;

And has had the time and;

Motivation;

To develop their coaching knowledge/abilities/skills;

As this is a business/work relationship;

The level of obligation is higher;

Disadvantages

A professional coach coaches for a living;

And therefore must be paid for their services;

Which must come from the athlete's earnings/ or grants;

This places a greater burden on both the coach and performer;

In terms of achieving success;

The coach performer relationship will often become very close;

And this may make it hard for the professional/work relationship to be viewed in a dispassionate/business like way;

And therefore be hard for the performer or the coach to break the partnership/contract;

National Governments have become increasingly concerned that they support the development of elite performance within their country.

a Why should this be the case?

(4 marks)

b Governments may determine national policy but a range of other organisations put the policy into practice.

i Describe the link between the UK Government, Sport England, the English Institute of Sport and a sport national governing body in relation to elite performer development.

(7 marks)

ii How would you evaluate whether a national programme to improve the development of elite performance was being successful?

(4 marks)

National Governments have become increasingly concerned that they support the development of elite performance within their country.

a Why should this be the case?

(4 marks)

4 marks for 4 of:

Development of national pride;

Country has responsibility to allow citizens to develop abilities to the full;

Promoting the country on the international scene/ attract world events;

Citizens like to see tax revenue used for 'good causes'

Sport seen to promote social value/ bring country together/ assimilation/benefits/

Elite performers may provide role models for young;

economic benefits, to country/regeneration or equivalent

continued

b Governments may determine national policy but a range of other organisations put the policy into practice.

i Describe the link between the UK Government, Sport England, the English Institute of Sport and a sport national governing body in relation to elite performer development.

(7 marks)

7 marks for 7 of:

Government through Dept Culture & Sport;

Sets national policy/objectives/guidelines;

This is put into a national sporting policy by Sport England;

Which also determines spending priorities for Exchequer;

And Lottery funding;

Sport England determines funding/policy for EIS;

EIS provides infrastructure for elite performer development;

In association with NGBs;

NGBs have to set performance targets;

In terms of medals etc;

And strategies for talent identification and development;

Before receiving funding support from Sport England;

NGBs undertake TIPs or eq;

Determine/recommend which performers receive national support/from Sport England/EIS;

continued

ii How would you evaluate whether a national programme to improve the development of elite performance was being successful?

(4 marks)

4 marks for 4 of:

Increase in number of medals won;

In single sport international championships/multi-sport championships;

Increase in number of internationally ranked performers;

Comparison in levels of success with other countries;

Comparable in size and wealth;

Meeting of agreed targets in terms of medals or eq;

Questioning performers/coaches etc on a regular basis;

The identification and development of sporting talent is an objective that many countries devote time and resources to achieving.

a In France this process may begin in schools.

i In what way does the French system of physical education and school sport play a part in the process of identifying and developing potential elite performers.

(4 marks)

ii In more general terms compare the structure, objectives and practices of school physical education in France and England (or Wales/Northern Ireland).

(5 marks)

b In France what role is undertaken by the Institute Nationale du Sport et de l'Education Physique (INSEP)?

(6 marks)

Governments of European countries strive to give all of their citizens opportunities to develop their abilities, no matter what their social background.

a Over the last 15 years the role of the UK government in the development of elite performers has changed.

Compare and contrast the present situation in France and the UK.

(9 marks)

b Compare and contrast the type of support a potential elite performer from a less advantaged social background might receive in France and the UK.

(6 marks)

The identification and development of sporting talent is an objective that many countries devote time and resources to achieving.

In France this process may begin in schools.

a

i In what way does the French system of physical education and school sport play a part in the process of identifying and developing potential elite performers.

(4 marks)

3 marks for 3 of:

Schools have clear links with clubs;

Aptitude tests undertaken in schools;

Brevet Aptitude de Physique;

Sport study sections/sport schools;

Which are sport specific;

Local multi-sport competitions monitored by Regional Associations for selection;

continued

a

ii In more general terms compare the structure, objectives and practices of school physical education in France and England (or Wales/Northern Ireland).

(5 marks)

France	**England**
Centrally controlled school curriculum;	*Controlled by a national curriculum/government directed;*
Assessment focus is mainly on physical performance;	*Focus on personal development/physical/skill;*
Strong focus on sport;	*Critical appreciation of skill/movement;*
School sport externally controlled;	*Assessment of ability to help others/work together Work safely/HRE;*
Wednesday pm sport;	*Most sport after school/ Saturday;*
Formal PE assessment 15, 17, 18;	*Assessment at each Key Stage;*
Curriculum by school stage Primary, Secondary, Upper Secondary;	*Curriculum organised within 4 Key Stages;*
Centralised system of physical testing;	*From general skill building to specific/specialising;*
6 hours - 3 hours per week;	*2 hours per week;*

continued

b In France what role is undertaken by the Institute Nationale du Sport et de l'Education Physique (INSEP)?

(6 marks)

5 marks for 5 of:

Provision of specialist facilities

Medical support;

Sport science support;

Determines level/type of financial support;

Elite or Senior or Young People or Reconversion (need min 2 for mark);

Plays a role in general education of performers to academic qualifications;

And post sport career development;

Acts as a centre for knowledge and information re sport performance/coaching etc;

Manages and develops Frances international sport relationships at the coaching/ sport knowledge level;

Puts into practice national/government/Ministry of Youth and Sport policy;

Works with national federations/technical directors;

Governments of European countries strive to give all of their citizens opportunities to develop their abilities, no matter what their social background.

a Over the last 15 years the role of the UK government in the development of elite performers has changed.

Compare and contrast the present situation in France and the UK.

(9 marks)

max 4 per section: **Situation in the UK**

In the past little government interest in practical terms;

Over the last 15 years UK government has taken much more of an interest;

Policy on development of elite performers is now more of a government priority;

With policy guidelines from government;

But carried out through UK Sport and national sports councils/Sport England or eq;

Levels of funding/funding priorities set by government in general terms;

With real power wielded by UK Sport/Sport England/ national sport councils;

NGBs play a key role;

Have real independence if they choose not to rely on government finance;

continued

Situation in France

Much longer period of direct involvement by government;

Policy on sport/elite performer development centrally set by Ministry for Youth and Sport;

Policies backed by law;

Strong role played by National Commission for High Level Sport;

Determines policy for development of elite performance;

Upon which national federations set own development plans;

Comparison

Longer history of government influence/involvement/direction in France than UK;

More central direction in France;

Through government legislation;

French success on international sport stage of more direct political concern than in UK;

In UK government influence tends to be through the control of funding;

Rather than through legislation;

But in effect wields as much power;

continued

c Compare and contrast the type of support a potential elite performer from a less advantaged social background might receive in France and the UK.

(6 marks)

max 4 per section

UK

Funding from lottery;

World Class Programme;

Performance/Potential/Start (all 3 for mark)

Any description of one set of criteria = 1 mark;

Support from club;

SportAid;

School/national curriculum has equal opportunities criteria;

Sport national governing bodies have sport equity targets which may include widening social base;

France

INSEP Funding;

Elite or Senior or Young People or Reconversion (need min 2 for mark);

High level of funding from local and national government;

Less reliance upon charitable donations and fund raising;

Sport plays a very important role in the life of the United States of America. The size of the country and its historical and cultural roots give the sporting experience in America a very distinctive flavour.

a "Winning is everything" is a dominant sporting ethic in professional sport in the USA.

i Explain this statement in the context of American Basketball, outlining possible consequences of losing.

(4 marks)

ii Why is this win ethic so strong in US society?

(3 marks)

b USA School and college sport may also reflect professional sport values.

i Compare school sport in the UK and in the USA.

(4 marks)

ii Discuss the advantages and disadvantages to an elite performer of inter-college sport in the USA.

(4 marks)

Sport plays a very important role in the life of the United States of America. The size of the country and its historical and cultural roots give the sporting experience in America a very distinctive flavour.

a "Winning is everything" is a dominant sporting ethic in professional sport in the USA.

i Explain this statement in the context of American Basketball, outlining possible consequences of losing.

(4 marks)

4 marks for 4 of:

high expectation of players and coaches;

from local community;

media focusses on winning teams/performers;

linked to financial losses and gains;

coaches and players under much pressure/may lose jobs;

huge resources devoted to training/preparation;

need to raise revenue; competitions keep as many teams involved for as long as possible/end of season play offs or eq;

winners earn large sums;

continued

ii Why is this win ethic so strong in US society?

(3 marks)

3 marks for 3 of: *historical effect of colonised country;*

frontier spirit/carving out a living/taking what is needed from the wild;

currently a superpower/strength/power is valued;

winning pervades whole culture/business/schools etc;

American Dream/culture of anyone can succeed if they want it/work for it hard enough;

b USA School and college sport may also reflect professional sport values.

iii Compare school sport in the UK and in the USA.

(4 marks)

4 marks for 4 of: *USA*

Better facilities;

Focus on fitness development in PE curriculum;

Focus on skill testing/fitness testing in curriculum;

Competitive sport separate from PE;

Huge community interest in school/college teams;

Professional coaches;

Financial support from community/business;

College scholarships;

Focus on developing loyalty to school/values;

Strong belief on social control/development possibilities of competitive sport;

continued

iv Discuss the advantages and disadvantages to an elite performer of inter-college sport in the USA.

(4 marks)

max 2 per section

Advantages

High level coaching/performer support;

Draft system provided direct route to pro teams;

Great interest from media/fans/community;

High level of team loyalty/camaraderie;

Disadvantages

distraction from academic studies;

over valuing athletic prowess in contrast to academic;

intensity of competition/possibility of injury;

winning rather than humanistic values of sport;

possible loss of scholarship/college place if play poorly/stop playing;

constant pressure to pay well/win;

Professional football in the United Kingdom demonstrates a clear relationship between the world of sport and commerce.

Examine the accounts of the Premier Division football club given below.

Spectators	Television	Sponsorship	Merchandising	Transfers (net)	Payment to shareholders
14.3m	6.4m	5.6m	6.8m	0.8m	1.00p per share

a What is merchandising?

(2 marks)

b The efforts of clubs to increase their revenue from merchandising are often criticised. Why should this be the case?

(4 marks)

c Sponsorship is obviously an important source of income. The government has recently banned certain manufacturers e.g. cigarette manufacturers from sponsoring sport.

Discus whether a commercial club should be concerned about the nature of the company or product from whom it receives sponsorship?

(4 marks)

The development of professional sport has resulted in a more business like approach by many to clubs.

a Sport and business have vary varied relationship which affects both a sport and a performer.

i Describe the ways in which business provides revenue for sport.

(3 marks)

ii How do the pressures of elite sport vary between an elite amateur and a professional performer?

(7 marks)

b In what ways might a sport be required to change its competitive structure and match organisation as a result of commercial pressures?

(5 marks)

Mark Scheme

Professional football in the United Kingdom demonstrates a clear relationship between the world of sport and commerce.

Examine the accounts of the Premier Division football club given below.

Spectators	Television	Sponsorship	Merchandising	Transfers (net)	Payment to shareholders
14.3m	6.4m	5.6m	6.8m	0.8m	1.00p per share

a What is merchandising?

(2 marks)

2 marks for: *the selling of goods;*

such as kit/books/mugs/mementos etc.;

bearing the club logo;

continued

b The efforts of clubs to increase their revenue from merchandising are often criticised. Why should this be the case?

(4 marks)

4 marks for 4 of:

Revenue is increasd by putting new/updated products on the market;

By changing kit colour/design several times a season;

This is frequently aimed at the younger/child end of the market;

Children wish to stay up to date;

And pressure parents to buy the new kit;

Many children who support football may come from lower-socio economic groups;

And such pressure puts a great strain on family budgets;

Parents often see this as exploitation;

continued

c Sponsorship is obviously an important source of income. The government has recently banned certain manufacturers e.g. cigarette manufacturers from sponsoring sport.

Discus whether a commercial club should be concerned about the nature of the company or product from whom it receives sponsorship?

(4 marks)

Sports clubs are engaged in what is ostensibly a healthy activity;

This must be reflected in the image they portray;

So it would be counter productive to link to a manufacturer of a non-healthy product;

Sports clubs often act as role models to the young;

It would be deemed unacceptable for this kind of club to be seen promoting unhealthy products;

No

If the product is legally on the market then there is no reason for a club not take sponsorship from that source;

As a commercial enterprise a professional club must seek to maximise its revenue;

It is unreasonable to expect a club to take moral judgements about controversial areas;

Mark Scheme

The development of professional sport has resulted in a more business like approach by many to clubs.

a Sport and business have vary varied relationship which affects both a sport and a performer.

i Describe the ways in which business provides revenue for sport.

(3 marks)

3 marks for 3 of:

1 sponsorship;

2 advertising contracts;

3 merchandising contracts/endorsements;

4 media contracts;

ii How do the pressures of elite sport vary between an elite amateur and a professional performer?

max 4 per section: **Amateur**

They may train as hard as any professional;

The intrinsic desire to win may be as great:

May also be external pressures to win;

Amateur will be juggling demands of sport and job;

May be tempted to turn professional;

Professional

Sport is their livelihood;

Career may be curtailed at any time;

Extrinsic pressures to win are very great;

May encourage deviant approach/cheating/drugs etc;

From stakeholders/managers/shareholders or eq;

Degree of job insecurity/less employment protection;

May be bought and sold with little control;

Expected to entertain;

Private life in public eye;

Sport performances constantly evaluated/commented upon by media;

continued

b In what ways might a sport be required to change its competitive structure and match organisation as a result of commercial pressures?

(5 marks)

change in timing of the season;

change in timing of weekly/regular league/cup fixtures;

use of pool stages rather than straight knock out;

end of season championship play offs;

no automatic up and down in league structure;

Match organisation

timing of match start times;

length/frequency of breaks increased;

pressure to change rules to make game more attractive/flow/dramatic;

pressure to end game at predictable time/penalty shoot outs or eq;

An up and coming sport in terms of participants is approached by a TV company offering a contract to broadcast the national final live.

a The national governing body have to decide whether or not to agree to this contract. What benefits and disadvantages might arise if they agree?

(5 marks)

b The TV company is renowned for its technical wizardry and sophistication. In its advertising of the game it claims that "it is as good as being there" Do you consider this to be a valid claim – give reasons for your answer.

(5 marks)

c How might the televising or other media use of the cup final undertake the roles of entertaining, educating, informing and advertising in relation to the general public?

(5 marks)

The extent and nature of media coverage of elite sport has developed over the last century.

a What factors influenced this development?

(6 marks)

b Prior to a recent world cup some elite cricketers objected to the organisers agreeing sole sponsorship and media rights for the players in the competition, and not allowing them to use their existing sponsorship or media contracts. The players threatened to strike.

Were the players justified in objecting to this arrangement? Give reasons for your answer

(5 marks)

An up and coming sport in terms of participants is approached by a TV company offering a contract to broadcast the national final live.

a The national governing body have to decide whether or not to agree to this contract. What benefits and disadvantages might arise if they agree?

(5 marks)

max3 per section

Benefits

The TV company will pay for the right to broadcast the match;

A nationwide broadcast might attract more participants to the sport;

Other broadcasters may be attracted after the initial programme;

The fact of being on television may attract sponsors to the sport;

The need to make the game attractive may bring advantages to players and spectators;

Disadvantages

The TV company may demand changes to the timing of the event to accommodate their own schedules;

The TV company may want changes to the format/rules etc to make the game "attractive" to a TV audience;

These changes may upset traditional viewers/spectators;

Fewer spectators may go the match if it is being broadcast live;

continued

b The TV company is renowned for its technical wizardry and sophistication. In its advertising of the game it claims that "it is as good as being there" Do you consider this to be a valid claim – give reasons for your answer.

(5 marks)

f:
max 3 per section

Yes

TV broadcasts give an accurate version of the game;

Can therefore tell the 'story' of the game;

Can also show aspects/incidents that might be missed;

Can be watched with friends to create atmosphere;

Can also see and hear crowd reaction;

Modern technology can enable viewer to 'see' the game from varying viewpoints;

No

TV broadcast is a false viewpoint;

Often taking a longer/wider shot than human vision;

Sometimes appears to slow the game;

Cannot replicate the inter-action of the spectator with the action on the pitch;

Or with other members of the crowd;

Cannot provide the atmosphere of travelling to the ground;

The feeling of being within the action/part of the action;

continued

c How might the televising or other media use of the cup final undertake the roles of entertaining, educating, informing and advertising in relation to the general public?

(5 marks)

max 2 per section

Entertaining *Providing enjoyment/thrills/excitement of the actual game;*

Giving background interest about the teams/individuals;

Some viewers/readers might enjoy knowing about the history/skills/fitness/other technical requirements of the sport/game/match;

Many people will enjoy reading match reports particularly if they have attended the game;

Educating *Viewers might learn about the rules/history/skill/tactics of the event;*

They could also learn about officials decision making;

Post match coverage

Informing *The TV company will give information about the timing of the broadcasting of the match;*

Other media will give details about the match time/ticket availability etc;

Most media will give the result;

And post match analysis of players/tactics etc;

Advertising *The TV company will advertise the fact that it is showing the game;*

And all the peripheral broadcasts;

It may also take ads out in other media to attract viewers;

Mark Scheme

The extent and nature of media coverage of elite sport has developed over the last century.

a What factors influenced this development?

(6 marks)

6 marks for 6 of:

Increase in literacy/people being able to read;

Due to increased level/extent of formal schooling to all members of society;

The development of nationwide leagues/standard of sport increased the public's interest in sport;

Media saw an opportunity to increase sales;

Technological development of radio and television;

Allowed the development of live broadcasts;

Technological developments of digital television enhanced viewer enjoyment of spectacle;

Satellite/cable television used sport as a commercial entity - wider range of sport/level of sport viewing;

Commercialisation of sport drove many sports into seeking media deals;

continued

b Prior to a recent world cup some elite cricketers objected to the organisers agreeing sole sponsorship and media rights for the players in the competition, and not allowing them to use their existing sponsorship or media contracts. The players threatened to strike.

Were the players justified in objecting to this arrangement? Give reasons for your answer

(5 marks)

,

max 2 per section: **Yes**

The organisers of the tournament have sole responsibility for the organisation of the contract;

They can therefore make such contractual arrangements as they see fit;

They are responsible for generating income for the whole competition/all the teams not just for those with existing contracts:

Granting sole rights/negotiating for all puts the organising committee in a strong position/can generate more money;

No

An existing contract should not be broken;

Players have the right to maintain control over the use of their images/names etc in a commercial contract;

The pre-existing contract reflects the individual worth of the performer;

This question has a number of sections that may be used as desired. Please note that it does not equate to a standard question.

Those with ability may not always become elite performers due to a wide range of non-performance barriers placed in their way. Although in many sports there are a large number of elite black performers stereotyping still has an effect.

a What effect does stereotyping have on elite or potential elite black sport performers?

(4 marks)

b What policies or strategies may a national governing body use to overcome the use of stereotyping and other discriminatory issues within their sport?

(4 marks)

Those from lower socio-economic groups may face difficulties in developing their talent to an elite level.

a Other than factors associated with lack of finance or physical resources what other problems may such performers face?

(3 marks)

b How may any of the barriers faced by those from lower socio-economic groups be overcome. Give examples to illustrate your answer.

(5 marks)

Mark Scheme

This question has a number of sections that may be used as desired. Please note that it does not equate to a standard question.

Those with ability may not always become elite performers due to a wide range of non-performance barriers placed in their way. Although in many sports there are a large number of elite black performers stereotyping still has an effect.

a What effect does stereotyping have on elite or potential elite black sport performers?

(4 marks)

4 marks for 4 of:

Assumptions are made about physical prowess;

That causes black performers to be selected for certain roles within a team;

And not others;

For the same reason elite black performance is wrongly ascribed to natural/genetic prowess;

Rather than dedication/hard work/determination etc;

Racist assumptions about decision making abilities may cause under representation in decision making roles within a team;

May become a self-fulfilling prophecy with elite black performers not coming forward for selection into those roles;

continued

b What policies or strategies may a national governing body use to overcome the use of stereotyping and other discriminatory issues within their sport?

(4 marks)

4 marks for 4 of:

Educate players/coaches/administrators within the sport;

Through the use of pamphlets/videos etc;

Put educational material into schools/youth clubs etc;

Use high profile role models to encourage under represented groups into under utilised roles;

Engage in an affirmative action programme/have a positive decision to enrol under represented groups/ set quotas/ have a positive affirmative action campaign to encourage recruitment/application;

Take positive action to remove bigots/racists/ those who discriminate from the sport;

Have a positive campaign to reduce racist actions/comments/chants from crowds/supporters etc.

Those from lower socio-economic groups may face difficulties in developing their talent to an elite level.

a Other than factors associated with lack of finance or physical resources what other problems may such performers face?

(3 marks)

3 marks for 3 of:

Some clubs may wish to restrict their membership to individuals from certain social groups;

This form of discrimination is normally covert/not overt/not stated publicly;

Is achieved by non-transparent selection/election membership policies;

May also be achieved by having economic barriers/high membership fees;

Individuals from certain socio-economic groups may feel 'not wanted'/lack the self-esteem to break into the club organisation;

Certain sports may have an image of upper/middle class exclusivity;

This may deter other groups from considering this as an activity;

continued

b How may any of the barriers faced by those from lower socio-economic groups be overcome. Give examples to illustrate your answer.

(5 marks)

Financial support from national governing bodies;

Financial support from government/lottery funding;

Requiring sports to have targets for participation from under-represented socio-economic groups;

National campaigns by sports to encourage participation;

Financial support from charitable organizations

Examples

Lottery funding

World Class programme;

Sport England equity targets;

Sport Aid;

Local Authority grant;